DOCUMENT RESUME

ED 049 185 SP 004 807

AUTHOR	Jordan, Daniel C.; Spiess, Kathryn H.
TITLE	Blueprint for Action: A Summary of Recommendations for Improving Compensatory Education in Massachusetts.
INSTITUTION	Massachusetts Univ., Amherst. School of Education.
SPONS AGENCY	Massachusetts Advisory Council on Education, Boston.
PUB DATE	Mar 70
NOTE	130p.
AVAILABLE FROM	Public Document Division, Room 116, The State House, Boston, Massachusetts ($1.33)
EDRS PRICE	EDRS Price MF-$0.65 HC-$6.58
DESCRIPTORS	*Compensatory Education, Early Childhood Education, *Educational Improvement, *Educationally Disadvantaged, Educational Objectives, Program Development, *Relevance (Education), Staff Role, *Teacher Education

ABSTRACT

This summarizes a more detailed report "Compensatory Education in Massachusetts: An Evaluation with Recommendations." The first part outlines four critical courses of action which will strengthen compensatory education: (1) establish appropriate program objectives; (2) establish sound evaluation components in all Title I projects; (3) establish several model compensatory programs; and (4) take steps to fill the findings and subsidiary recommendations, presented under the following headings which are related to the observation protocol and questionnaire used to collect the data: (1) planning procedures; (2) formulation of project objectives; (3) selection of project participants; (4) project evaluation; (5) program modification; (6) staff characteristics, selection and recruitment; (7) preservice and inservice training; (8) developing effective learners; (9) motivational aspects of the program; (10) parent, home, and community involvement. The agencies which should be responsible for carryihng out the various recommendations are considered, and a model program is presented. This describes the characteristics of the competent learner, the structure and function of the model program, and the selection and recruitment of staff for training. The roles and training experiences of the various staff members are listed.

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BLUEPRINT FOR ACTION:

A SUMMARY OF RECOMMENDATIONS

FOR IMPROVING COMPENSATORY EDUCATION IN MASSACHUSETTS

Submitted to

The Massachusetts Advisory Council on Education

by

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March 1970

SP004807

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BLUEPRINT FOR ACTION:

A SUMMARY OF RECOMMENDATIONS

FOR IMPROVING COMPENSATORY EDUCATION IN MASSACHUSETTS

This document functions as a summary of the report, Compensatory Education in Massachusetts: An Evaluation With Recommendations, and is published separately for those who have no need for the detailed information of the complete report.

For the busy reader who wants to have a quick grasp of the essentials of the full report and yet does not want to read the summary in its entirety, the subsection entitled "Four Critical Courses of Action: What Can Be Done to Strengthen Compensatory Education in Massachusetts," pages 4 - 18, contains all of the high priority recommendations and serves as a digest of the summary.

For those planning in-service and pre-service training programs, the section, "Model Programs for Training Compensatory Education Personnel," pages 55 - 100, may prove useful. The summary itself contains suitable background material for use in such training programs.

BLUEPRINT FOR ACTION:

A SUMMARY OF RECOMMENDATIONS

FOR IMPROVING COMPENSATORY EDUCATION IN MASSACHUSETTS

INTRODUCTION

Over 135,000 school children in the State of Massachusetts have backgrounds which did not prepare them for successful performance in traditional school systems. Thousands of similar children not yet in school will continue to enter school at some future time unprepared and therefore disadvantaged. To guarantee these children an equal educational opportunity means that they must be provided with special learning experiences that will enable them to compensate for disadvantages created by inadequate preparation.

For all practical purposes, compensatory education in the State is financed by Title I (Elementary and Secondary Education Act of 1965) funds. In fiscal year 1968, the State received over $16 million in Title I funds to finance 466 compensatory education projects involving over 100,000 students in 305 school districts. A comparable amount was received for fiscal year 1969. Our study dealt with

practically every aspect of a ten percent random sample of these projects. Based on the findings of the study, forty-eight recommendations for improving compensatory education in the Commonwealth have been formulated. Those recommendations which have been assigned the highest priority define four basic courses of action that must be taken if the pressing needs of the State's disadvantaged children are to be met.

FOUR CRITICAL COURSES OF ACTION:

WHAT CAN BE DONE TO STRENGTHEN COMPENSATORY EDUCATION IN MASSACHUSETTS

The findings of our study are consistent with the findings of a large number of similar studies on compensatory education and on Title I programs in particular. On the one hand, our findings indicate an impressive accumulation of experience in working with disadvantaged children on the part of hard-working and devoted teachers, aides, and administrators and, on the other hand, a growing disillusionment and frustration, frequently not readily admitted, with compensatory education as currently conceived and practiced. The reason for the frustration is clear: this kind of education is not producing significant results of lasting value in sufficient numbers of students fast enough to deal with a problem

that has already reached vast proportions and is still growing at an alarming rate.[1]**

Our findings point to four basic characteristics of compensatory education as presently conceived and practiced in Massachusetts which keep it from efficiently producing significant results of a permanent nature:

(1) Lack of explicit objectives, operationally defined, which deal with the basic problems of the disadvantaged child;

(2) Lack of sound designs for evaluating programs so that they can be continually improved;

(3) Lack of model compensatory education programs which demonstrate appropriate curricula and effective teaching methods; and,

(4) A critical shortage of well-trained compensatory education manpower.

All of our recommendations support four basic courses of action which are pertinent to these weaknesses and which we believe will, if fully implemented, dramatically strengthen the programs in compensatory education and make them effective. They are:

(1) Establish appropriate program objectives, operationally defined, and center all planning on these objectives;

** Footnotes are numbered consecutively and are contained in the section on "Notes and References" beginning on page 101.

(2) Establish sound evaluation components in all Title I projects for use in systematic modification towards program improvement;

(3) Establish several model compensatory education programs which may be adopted with appropriate modification in other localities; and,

(4) Take steps to fill the compensatory education manpower shortage by setting up training programs consistent with the above three courses of action.

I. ESTABLISH APPROPRIATE PROGRAM OBJECTIVES

During the first four or five years of their lives, most middle-class children go through a "hidden" curriculum which provides for them the kinds of basic learning competencies that are prerequisite to successful performance in school.[2] Up to the present time, schools have based their curricula, their teaching methodology, and their grading and incentive systems upon the erroneous assumption that everyone coming into the school has had exposure to that "hidden" curriculum and mastered it reasonably well. A child growing up in poverty or semi-poverty will also be exposed to a "curriculum"--one that enables him to survive in his culture, to be sure, but also one that does not provide him with the kinds of learning competencies prerequisite for successful performance in schools as they are currently set up.

In coming to the school situation, he is clearly at a tremendous disadvantage when compared to his more affluent peers. The school then compounds the disadvantage by giving him learning tasks the prerequisites to which he has not yet mastered, thereby setting him up for a guaranteed failure. Being stuck in such an intolerable and unjust position and being forced to accumulate failures over long periods of time generate such negative emotional by-products, all associated with the formal learning situation, that effective learning within the formal context becomes impossible. Since failure in school reduces opportunities for attaining future economic security and continuing growth and development, both socially and personally, the magnitude of this problem approaches incomprehensible dimensions. Its ramifications are far-flung largely because the situation perpetuates itself through a cycle that is difficult to interrupt.

There are approximately 15 million children in the United States who find themselves locked in a system that is not helping, but in many cases making things worse. Compensatory education has come to be regarded as one of the most promising means of helping these children. This kind of education is intended to "compensate" for the missed "hidden" curriculum. Unfortunately, there is a widespread tendency to cast compensatory education

into a remedial mold or put it in the form of general enrichment activity, neither of which can compensate for inadequate preparation for school. Both remedial work and enrichment experiences have their place, but if they do not focus on the task of developing competent learners, they are apt to have very little permanent or even short-term effects.[3,4] Our data indicate that Title I programs in Massachusetts are similar to the variety of compensatory education programs prevalent throughout the United States--programs which do not focus on developing competent learners and which are therefore not being maximally effective.[5] We therefore hope that the following recommendation will be regarded as urgent and critical:

(34)** THAT THE STATE DEPARTMENT TITLE I OFFICE MAKE THE DEVELOPMENT OF EFFECTIVE AND COMPETENT LEARNERS THE REQUIRED MAIN OBJECTIVE OF ALL TITLE I PROGRAMS AND THAT LOCAL PROJECTS BE GIVEN ASSISTANCE IN TRANSLATING THIS MAIN OBJECTIVE INTO SPECIFIC BEHAVIORAL OBJECTIVES RELEVANT TO THEIR OWN PROGRAMS.

(The characteristics of a competent learner are outlined on pages 56-59 of this document.)

** In the main body of the study, recommendations are numbered consecutively, but not in order of priority. These same numbers are used to identify the recommendations in this summary so that they may be easily referred to in the context of the findings presented in greater detail in the section on "Analysis of Data and Recommendations," beginning on page 130 of the full report.)

In education everywhere there is evidence of a distinction between what educators say they propose to do and what they find themselves doing. In compensatory education this is particularly true (largely because we have a better notion of what we want to achieve than how to achieve it). This is not a matter of willful deception, but a problem of inadequate attention to the evaluation process as it relates to objectives and priorities within objectives.

Stake and Denny have expressed it succinctly:

> Not only must the evaluator report the goals but he must indicate the relative importance of the goals. Goals are not equally desirable; some have priority over others. Different educators will set different priorities, and the same educator will change his priorities over time. Priorities are complex and elusive, but the evaluation responsibility includes the job of representing them. New conceptualizations and new scaling techniques are needed to take a first step toward discharging this responsibility.
>
> The great weakness in our present representation of goals is that it does not guide the allocation of resources. Goals compete for our support, for our efforts. Relying on some explicit or implicit priority system, those who administer education decide among alternative investments, operational expenditures, and insurances. Evaluation requires an acknowledgement of priorities.[6]

Not only do the priorities need to be clear, but the objectives need to be explicit and operational. Otherwise, they

cannot be communicated, will be useless as a guide, and can easily be changed without being noticed.[7,8,9] Our findings clearly indicate the need to implement the following recommendation within the context of the preceding one:

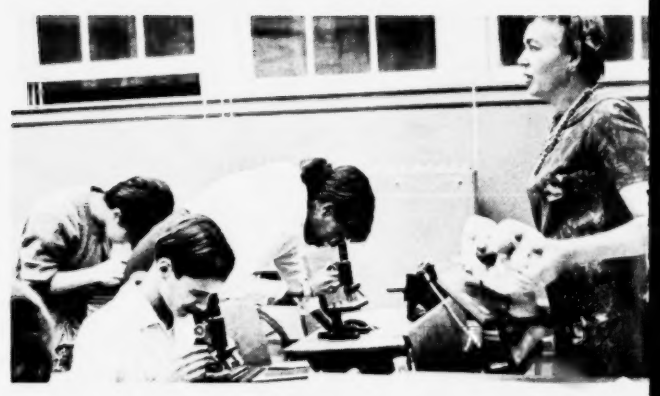
(8) THAT THE STATE DEPARTMENT TITLE I OFFICE PUBLISH GUIDELINES ON FORMULATION OF PROGRAM OBJECTIVES WHICH WILL INCLUDE AN ELABORATION ON THE FOLLOWING SUGGESTIONS:

A. OBJECTIVES SHOULD BE GENERATED OUT OF ASSESSED NEEDS AND BE FEASIBLE IN TERMS OF RESOURCES AVAILABLE

B. OBJECTIVES SHOULD REFLECT A HIERARCHY OF PRIORITIES SO THAT RESOURCES, TIME, AND PERSONNEL CAN BE ALLOTTED ACCORDINGLY

C. PROGRAM OBJECTIVES SHOULD BE CLEARLY STATED IN BEHAVIORAL TERMS THAT ESTABLISH PERFORMANCE CRITERIA FOR STUDENTS AND SPECIFIC SUCCESS CRITERIA FOR THE PROGRAM

D. PROGRAM OBJECTIVES SHOULD BE DISSEMINATED TO ALL STAFF MEMBERS AND BE INCLUDED AS A PART OF THEIR PRE-SERVICE AND IN-SERVICE TRAINING SO THAT EVERYONE KNOWS HOW HE IS RELATED TO THE ACHIEVEMENT OF THE OBJECTIVES



In connection with "C" above, it is important to bear in mind
t least two basic criteria for program success:

(1) That students achieve at a rate <u>above</u> the norm, and
(2) That students receiving compensatory education exhibit achievement levels statistically significantly higher than a comparable control group which does not have the compensatory treatment.

nything less than this will be an indication of program ineffec-
iveness.[10, 131]

I. <u>ESTABLISH SOUND EVALUATION COMPONENTS IN ALL TITLE I PROJECTS</u>

Once objectives have been specified and the program planned
round them, there is no way of determining whether or not, or
o what degree they were achieved without a carefully planned eval-
ation component. It is clear that good evaluation is the <u>sine
ua non</u> of program improvement. There is little hope of insuring
ood evaluation unless adequate time and resources are allocated
or this purpose. Above all, qualified personnel are required.
iven the scarcity of trained evaluators, it is all the more impor-
ant for this kind of expertise to be present in the Title I

Office.[11] Although the State report for 1968[12] indicates a growing sophistication in evaluation (and we have seen some evidence for this), our data nonetheless clearly indicate a great need for improvement of the evaluation procedures employed by project directors. We therefore recommend:

(11) THAT THE TITLE I STATE DEPARTMENT OFFICE RETAIN TWO OR MORE FULL-TIME PROFESSIONALLY QUALIFIED PROGRAM EVALUATORS WHO CAN BE ASSIGNED THE RESPONSIBILITY FOR REVIEWING THIS ASPECT OF ALL PROPOSALS, MONITORING THE EVALUATION PROCESS OF THE PROGRAMS, AND FOR HELPING TO MOBILIZE EVALUATION RESOURCES TO ASSIST LOCAL DISTRICTS AS NEEDED.

It is important to note here that one percent of the State allocation for Title I can be used by the State for administration of programs. In Massachusetts this amounted to $167,965 in fiscal year 1968-69. During last year, only $77,663 was used, the rest being returned to the federal government. Thus, this recommendation is not unrealistic from a financial point of view.

Since State agencies are frequently not able to compete for adequately trained staff, particularly in the area of evaluation, we suggest:

(12) THAT THE TITLE I STATE DEPARTMENT OFFICE ESTABLISH CONTRACTUAL AGREEMENTS WITH BUSINESS OR INSTITUTIONS OF HIGHER LEARNING TO PROVIDE TRAINING AND/OR CONSULTANT SERVICES TO EVALUATION STAFF MEMBERS ON THE LOCAL LEVEL OR ENCOURAGE LOCAL DISTRICTS TO DO SO.[13]

(13) THAT SPECIFIC ENCOURAGEMENT BE GIVEN TO LOCAL EDUCATIONAL AGENCIES TO APPOINT PAID EVALUATORS TO TITLE I PROGRAM STAFFS AND THAT IT BE MANDATORY THAT THESE EVALUATORS BE INCLUDED ON THE PLANNING STAFF.

(14) THAT THE STATE DEPARTMENT OF EDUCATION ORGANIZE A POOL OF UNIVERSITY CONSULTANTS WHO CAN BE DRAWN UPON BY LOCAL DISTRICTS FOR ASSISTANCE IN PLANNING, IMPLEMENTING, AND EVALUATING THEIR PROJECTS.

It should be noted here that the Massachusetts Advisory Council on Education and the Title I Office in the State Department have already acted on recommendation 14. Consultants from various institutions of higher learning have been identified and already brought together for a discussion of their responsibilities. Lists of these consultants and their addresses have been made available to all Title I programs.

(15) THAT PART OF THE FUNDS FOR TITLE I PROGRAMS SHOULD BE MADE AVAILABLE TO PROVIDE RELEASE TIME FOR POTENTIAL TITLE I STAFF MEMBERS FOR PLANNING, EVALUATION, PRE-SERVICE, AND IN-SERVICE TRAINING. GUIDELINES SHOULD SPECIFY THIS AND SUGGEST VARIOUS KINDS OF ARRANGEMENTS FOR DOING IT.

With the possibility of adequate assistance being offered, it becomes reasonable to establish the requirement embodied in the recommendation:

(16) THAT SOUND EVALUATION DESIGNS BE CONSIDERED A REQUIRED PART OF THE PROPOSAL FOR FUNDS AND THAT NO PROJECT BE FUNDED IF IT DOES NOT HAVE AN ACCEPTABLE EVALUATION DESIGN.

It is a common practice for administrators to require reports of various kinds which are seldom read and rarely used. Evaluation reports are no exception and our data show that for the most part the basic purposes of evaluation reports (modification towards improvement[14]) are frustrated by:

(a) The design of the report forms;
(b) The medium of the report;
(c) The pattern of dissemination; and,
(d) The timing and frequency of dissemination.

ather than being a vehicle for change, evaluation reports are requently viewed as an official opportunity to justify what as been done by presenting the program in the most positive light ossible. This attitude always has an effect on dissemination atterns and reduces the utility of reports considerably. We be- ieve the following recommendations are essential to the reali- ation of the purposes of evaluation:

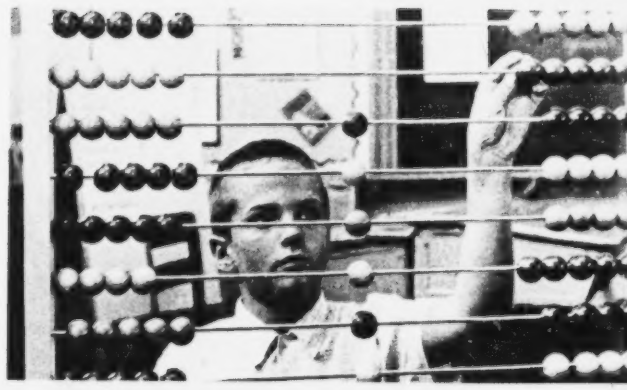
(20) THAT THE STATE DEPARTMENT TITLE I OFFICE CREATE AND ADOPT A NEW EVALUATION REPORTING SYSTEM, GIVING ATTENTION TO THE USE OF NEW REPORT FORMS, DIFFERENT MEDIA FOR DIFFERENT AUDIENCES,[15] PATTERNS OF DISSEMINATION,[16] AND FREQUENCY AND TIMING OF DISSEMINATION,[17] ALL GEARED TO FACILITATE PROGRAM MODIFICATION FOR IMPROVEMENT. SPECIFICALLY, EVALUATION REPORTS COMING AT THE END OF A PROJECT SHOULD BE REQUIRED TO INCLUDE CONCRETE RECOMMENDATIONS FOR PROGRAM MODIFICATION, OR PRESENT EVIDENCE AS TO WHY THE PROGRAM SHOULD NOT BE MODIFIED WHEN REPEATED.

(21) THAT EVALUATION RESULTS OF A PREVIOUS YEAR'S PROGRAM BE MADE A MANDATORY SOURCE OF INPUT FOR THE CURRENT YEAR'S PLANNING. PROPOSALS SHOULD THEREFORE REQUIRE SOME KIND OF EVIDENCE CONFIRMING COMPLIANCE.

III. ESTABLISH SEVERAL MODEL COMPENSATORY EDUCATION PROGRAMS

Given the magnitude of the educational problems facing disadvantaged youngsters and the fact that deficits accumulate rapidly with passing time, it is imperative for methods of compensatory education that are highly successful to be identified[18] as soon as possible and then be put into operation as models. By providing adequate rewards and incentives,[19] these models will be adopted in localities where evaluation demonstrates that little success is being achieved. Identifying such approaches may require a greater investment of resources initially but will pay off in the long run. We therefore recommend:

(42) THAT THE STATE DEPARTMENT TITLE I OFFICE COLLABORATE WITH THE BOARD OF HIGHER EDUCATION, SELECTED INSTITUTIONS OF HIGHER LEARNING AND PROMISING SCHOOL DISTRICTS IN THE DEVELOPMENT OF SEVERAL CAREFULLY DESIGNED COMPENSATORY EDUCATION MODELS WHICH CAN BE RIGOROUSLY EVALUATED AND RESULTS FROM WHICH CAN BE DISSEMINATED TO OTHER PROJECTS. SUCH MODELS SHOULD BECOME DEMONSTRATION CENTERS WHERE STUDENT TEACHERS MAY BE TRAINED AND WHERE SITE VISITS MAY BE MADE BY THOSE WORKING IN COMPENSATORY EDUCATION.



In the above recommendation we are referring to the kind of evaluation specified by Edward Suchman:

> The key conceptual elements in a definition of evaluation from a methodological point of view are (1) a planned program of deliberate intervention, not just any natural or 'accidental' event; (2) an objective or goal which is considered desirable or has some positive value, not simply whatever change occurs; and (3) a method for determining the degree to which the planned program achieves the desired objective. Evaluation research asks about the kind of change desired, the means by which this change is to be brought about, and the signs according to which such change can be recognized.[20]

The specifications of a suggested model program are presented in the section "Model Program for Training Compensatory Education Personnel," beginning on page 55.

IV. TAKE STEPS TO FILL THE COMPENSATORY EDUCATION MANPOWER SHORTAGE

According to a 1967 Yeshiva University report to the Civil Rights Commission, only 3% of the 15,000 teachers graduating in 1966 from the ten major institutions that certify public school teachers in the United States had received any orientation in teaching disadvantaged children.[21] Yet, it is estimated that 20-30% of the children in the nation's schools require compensatory education.

This general lack of preparation for teaching the disadvantaged is reflected in our data from the sample. We therefore recommend:

(43) THAT IN ORDER TO MEET A CRITICAL MANPOWER SHORTAGE IN COMPENSATORY EDUCATION, THE STATE DEPARTMENT OF EDUCATION, IN COLLABORATION WITH SELECTED INSTITUTIONS OF HIGHER LEARNING AND PUBLIC SCHOOL SYSTEMS, GIVE TOP PRIORITY TO THE ESTABLISHMENT OF MODEL PROGRAMS, BOTH PRE-SERVICE AND IN-SERVICE, FOR TRAINING A VARIETY OF COMPENSATORY EDUCATION PERSONNEL; THAT THESE PROGRAMS BE BASED ON UP-TO-DATE RESEARCH FINDINGS CONCERNING LEARNING AND THE KINDS OF EXPERIENCES THAT ARE PREREQUISITE TO THE DEVELOPMENT OF COMPETENT LEARNERS, PARTICULARLY AS THESE EXPERIENCES RELATE TO THE DISADVANTAGED; THAT THEY INCLUDE MODEL COMPONENTS ON EVALUATION AND CURRICULUM; THAT THE PROGRAMS BE SELECTIVE IN WHOM THEY ADMIT AND RIGOROUS IN EXTENT AND DEPTH OF TRAINING; AND, THAT THEY BE CAREFULLY EVALUATED.

Please see the section "A Model Program for Training Compensatory Education Personnel," page 55, for specifications of a suggested model.

SUMMARY OF STUDY FINDINGS AND SUBSIDIARY RECOMMENDATIONS

This section contains brief summaries of some of the basic findings and all subsidiary recommendations. They are presented under headings consistent with the observation protocol and questionnaire used to collect the data and represent elaborations on the high priority recommendations of the previous section.

The findings are summarized in brief form and therefore are usually general rather than specific in nature. Furthermore, rather than stressing strong points, they have been phrased in a way that highlights the weaknesses to which the subsequent recommendations pertain. This should not be construed to mean that there were no programs with strong features. There were several programs that had innovative and imaginative approaches and most had a dedicated staff. Some projects are already doing some of the things we are recommending. We acknowledge the excellence of these projects or aspects of them and know that members of their staffs will appreciate the reason for our approach.

PART I: PROJECT PLANNING, EVALUATION, AND MODIFICATION

PLANNING PROCEDURES

SUMMARY OF FINDINGS FROM SAMPLE OF TITLE I PROJECTS

Participants in Planning Process

* *Planning is done largely by administrative personnel*
* *Less than 1/5 of the planning staff for Title I programs were teachers*
* *81% of projects received no university assistance*
* *Community organizations rarely involved significantly in planning process*
* *Students seldom participated in planning*
* *Parents never mentioned as participants in planning*

Needs Assessment

* *No systematic review of needs*
* *Little attention was given to establishing priorities among needs*
* *Three highest ranking needs identified were:*

1. *Reading improvement*
2. *Improvement of self-image*
3. *Improvement of attitude toward school*

Planning Time

* *Most felt there to be inadequate lead time for planning*
* *Congressional appropriation schedules do not coincide with school year cycle and hampers sound planning and project implementation*

Program Repetition

* *9 out of 33 projects were repeated with no revisions*
* *Most revisions concerned matters related to personnel*
* *6 of 33 projects indicated they had used the previous year's evaluation in making revisions*

Planning of Pre-service and In-service Training of Staff

* *Little evidence of careful planning for staff training*
* *When planning did occur, it often did not have a focus congruent with objectives*

ECOMMENDATIONS

There are several partners which must join hands in providing ffective compensatory educational services for disadvantaged

youngsters: the youngsters themselves and their parents; school personnel; and, representatives of the community and its agencies and institutions. The more involved all members of the partnership are in the conception of programs, the better the programs are likely to be, not only because there will be many useful perspectives on needs and objectives forthcoming from a team effort, but also because participation in the creation of something tends to inspire commitment and support for it.[22] We therefore recommend:

(1) THAT LOCAL SCHOOL DISTRICTS BE ENCOURAGED THROUGH WHATEVER APPROPRIATE MEANS TO DEVELOP MORE BALANCED PLANNING COMMITTEES WHICH WILL INCLUDE TEACHERS, SPECIALISTS, PARENTS, COMMUNITY REPRESENTATIVES, STUDENTS, AND EVALUATORS (BOTH LOCAL AND FROM THE STATE DEPARTMENT).

However, such team effort takes more time and, as our data show, this is often not available because of unrealistic deadlines for submitting proposals and lack of release time from other responsibilities on the part of school personnel.[23,24] We recommend:

(2) THAT THE STATE DEPARTMENT OF EDUCATION, TITLE I OFFICE, STUDY THE PACING OF EVENTS STARTING FROM THE INITIAL PLANNING TO THE BEGINNING OF THE PROJECT AND THAT ON THE BASIS OF THAT STUDY NEW DEADLINES BE ESTABLISHED FOR (a)

SUBMISSION OF PROPOSALS OR PROSPECTUSES AND (b) REVIEW AND APPROVAL/DISAPPROVAL OF PROPOSALS SO THAT ADEQUATE LEAD-TIME CAN BE MADE AVAILABLE FOR:

1. PROGRAM PLANNING INVOLVING COMMUNITY MEMBERS AND PARENTS
2. PERSONNEL SELECTION AND RECRUITMENT
3. PRE-SERVICE TRAINING, AND
4. ORDERING OF SUPPLIES AND EQUIPMENT AND ARRANGING FIELD TRIPS

IF A GIVEN SCHOOL SYSTEM WANTS TO RADICALLY CHANGE ITS PROGRAM, WE SUGGEST THAT THE TITLE I OFFICE CONSIDER INITIATING A PRE-PROPOSAL REVIEW TO AVOID LAST MINUTE REJECTION.

Many of the deadlines are somewhat inflexible and badly timed due to Congressional appropriation schedules. This has been documented by any number of studies and represents a serious obstacle to effective program planning and administration.[25] We therefore recommend:

(3) THAT THE STATE DEPARTMENT OF EDUCATION DETERMINE THE OPTIMUM TIME(S) FOR RECEIVING MONIES FROM THE U. S. OFFICE OF EDUCATION AND PRESS FOR A REVISION IN U.S.O.E. POLICY THROUGH EVERY AVAILABLE CHANNEL USING EVERY AVAILABLE MEANS.

When pre-service or in-service training is not carefully planned, it tends to be taken over by a concern for administrative details or specific problems as perceived by the staff. If training is related only to problems as they arise, very often important aspects of training are neglected and if it is too informal, it tends not to be conducive to a disciplined inquiry and acquisition of important knowledge. With the wealth of knowledge accumulating in the area of compensatory education, all teachers should be exposed to it. Although independent study should not be discouraged, there are advantages to a well planned training program characterized by extensive interaction among staff members. It helps to achieve a cohesiveness and integrity of the project when it is operational, and particularly so when staff members are directly involved in the planning of their own pre-service and in-service training. For these reasons we recommend:

(4) THAT PRE-SERVICE AND IN-SERVICE TRAINING BE CONSIDERED AN INTEGRAL PART OF EACH PROJECT WHICH REQUIRES CAREFUL PLANNING CONSISTENT WITH THE CURRICULUM FOR STUDENTS, THE OBJECTIVES OF THE PROJECT, AND THE TRAINING NEEDS OF THE STAFF.

Good programs depend on good planning and good planning involves identification of needs and setting priorities. Our

data indicate that more attention should be given to this aspect of planning. Our recommendation is:

(5) THAT THE STATE DEPARTMENT PROVIDE SOME SPECIFIC GUIDELINES AND SUGGESTIONS FOR PROJECTS TO FOLLOW IN IDENTIFYING NEEDS AND SETTING UP THEIR OWN PRIORITIES.

Deciding how specific needs are to be met constitutes one of the greatest challenges in planning. Without the assistance of theories concerning learning and the problems faced by the disadvantaged--theories which research has begun to demonstrate as useful and productive, programs can be planned on a trial and error basis only; and, if evaluation is inadequate, errors can never be identified. Project data show a real lack of the use of theory in planning. We therefore recommend:

(6) THAT TITLE I PROGRAM PLANNERS BE ENCOURAGED TO IDENTIFY AND DOCUMENT A THEORETICAL BASIS FOR THE PROJECT CONTENT AND METHOD AS PART OF THEIR PROPOSALS.

In many cases, planning took little effort because the project was being repeated. Further, our data indicate that usually there was no justification, based on the project's demon-

strated efficacy, for repeating it. Under this arrangement, ineffective, useless, or even harmful elements of projects may be repeated. Even if a given activity is just useless in itself, it is still harmful because it takes the child away from the regular classroom where he would be learning something.[26] We therefore recommend:

(7) THAT THE STATE DEPARTMENT TITLE I OFFICE REQUIRE DOCUMENTATION FROM SOUND EVALUATION PROCEDURES THAT THE PREVIOUS YEAR'S PROJECT HAS BEEN SUCCESSFUL OR SHOWN SUBSTANTIAL PROGRESS BEFORE APPROVAL FOR REPETITION OF THE PROJECT IS GRANTED.[27]

FORMULATION OF PROJECT OBJECTIVES

SUMMARY OF FINDINGS

* *In general, project objectives were not expressed in behavioral terms*[28,29]
* *Success criteria for projects and/or students were rarely defined*
* *Generally speaking, project objectives were congruent with the needs specified*
* *Only a few of the projects had objectives which reflected an awareness of the need for disadvantaged youngsters to learn at a rate above the norm*

RECOMMENDATION

(Recommendation no. 8 is a high priority recommendation and appears in the section "Four Critical Courses of Action.")

SELECTION OF PROJECT PARTICIPANTS

SUMMARY OF FINDINGS

* *Generally speaking, projects are serving the appropriate population, but selection criteria are not consistent or uniform*
* *In a few cases Title I funds support summer programs to which anybody may come*

RECOMMENDATIONS

(9) THAT MORE SPECIFIC GUIDELINES AND ASSISTANCE BE PROVIDED BY THE STATE DEPARTMENT TITLE I OFFICE TO LOCAL SCHOOL DISTRICTS FOR DETERMINING ELIGIBILITY FOR PARTICIPATION IN PROGRAMS IN ACCORDANCE WITH THE INTENT OF TITLE I LEGISLATION AND THAT THE TITLE I OFFICE CONSIDER REQUIRING MORE DETAILED INFORMATION ON CRITERIA FOR SELECTING STUDENTS.[30,31]

(10) THAT SUMMER PROJECTS BE MORE CAREFULLY MONITORED TO INSURE THAT TITLE I FUNDS ARE NOT BEING USED TO FINANCE

A REGULAR SUMMER SCHOOL WHICH CAN BE ATTENDED BY ANY-ONE AND WHICH SHOULD BE FINANCED BY LOCAL DISTRICTS.[32]

PROJECT EVALUATION

SUMMARY OF FINDINGS

* *A little less than half the projects reported no evaluation design*
* *Pre-test, post-test was most common design used*
* *Control groups were rarely used (only one case in the sample)*
* *No attempts were made to measure any characteristics of the environment that may have a bearing on learning*
* *There was a general lack of communication about Title I students from summer projects to winter ones*
* *74% of the projects used standardized tests to evaluate student progress, achievement batteries being the most popular*
* *Very little testing in areas of self-image and attitude change, in spite of the fact that these were prominent aspects of program objectives*
* *Considerable testing that was done did not pertain directly to program objectives*
* *Data collected for evaluation purposes were frequently not utilized; 22 out of 36 projects made little or no effort to analyze data*
* *Evaluation procedures were generally unsophisticated and were not built into the project as an ongoing process*

RECOMMENDATIONS

(Recommendations 11 - 16 are considered high priority recommendations and appear in the section "Four Critical Courses of Action.")

Evaluation has always been required for Title I,[33] but too loose a definition of evaluation has been applied in approving and monitoring projects. Good evaluation requires financial support. In many cases more resources than are currently permissible may be needed. We recommend:

(17) THAT THE STATE DEPARTMENT SEEK, THROUGH WHATEVER APPROPRIATE MEANS, TO HAVE FISCAL POLICIES RELATED TO ALLOCATIONS FOR EVALUATION CHANGED TO ENCOURAGE MORE SUBSTANTIAL SUPPORT FOR EVALUATION.[34]

To upgrade further the quality of evaluation, we recommend:

(18) THAT SPECIFIC GUIDANCE THROUGH THE TITLE I STATE DEPARTMENT OFFICE (WHICH MAY FIND IT HELPFUL TO DRAW UPON CONSULTANTS FROM APPROPRIATE UNIVERSITY DEPARTMENTS) BE GIVEN TO LOCAL DISTRICTS WHO ARE PLANNING A TITLE I PROGRAM ON:

(a) MODELS OF ACCEPTABLE EVALUATION DESIGNS AND PROCEDURES;[35]

(b) WHAT KINDS OF TESTS AND MEASUREMENTS ARE

VALIDATED AND APPROPRIATE (PARTICULARLY IN THE AREAS OF SELF-IMAGE AND ATTITUDE CHANGE) TO USE IN CONJUNCTION WITH GIVEN PROGRAM OBJECTIVES;[36]

(c) TYPES AND METHODS OF USING UNOBTRUSIVE MEASURES;[37]

(d) HOW TO ANALYZE, USE, AND STORE DATA SO THAT THE INFORMATION IS HELPFUL IN INTRODUCING MODIFICATIONS TO IMPROVE THE PROGRAM;

(e) WAYS OF HANDLING EVALUATION IN THE CASE OF JOINT OR COOPERATIVE PROJECTS, PARTICULARLY THOSE INVOLVING NON-PUBLIC SCHOOLS;[38] AND,

(f) PERT CHARTING OR SOME OTHER SIMILAR DEVICE FOR SETTING UP AND MONITORING THE EVALUATION PROCESS.[39]

Putting theory into practice and ascertaining its efficacy over a long period of time is of primary importance. Our data indicate that such demonstrations are needed and would be extremely useful for ongoing projects. They would undoubtedly serve as a powerful stimulus for modifying and improving many of

the projects which are repeated annually. We therefore recommend:

(19) THAT THE TITLE I STATE DEPARTMENT OFFICE CONSIDER SETTING UP A SAMPLE OF PROJECTS FOR LONGITUDINAL EVALUATION OF THE EFFECTIVENESS OF TITLE I PROGRAMS. THIS WOULD NECESSITATE DETERMINING THE KINDS OF DATA TO BE COLLECTED AND ASSISTING LOCAL DISTRICTS IN SETTING UP AN APPROPRIATE SYSTEM FOR COLLECTING AND STORING THE DATA. OF PARTICULAR CONCERN HERE ARE: THE COMPARATIVE EVALUATION OF PAIRED MODELS OF TITLE I PROGRAMS WHICH VARY ON ONE DIMENSION, SUCH AS THOSE PROGRAMS SERVING THE SAME AGE GROUP EACH YEAR COMPARED TO THOSE FOLLOWING-THROUGH ON THE SAME STUDENTS FOR SEVERAL CONSECUTIVE YEARS AS STUDENTS CHANGE FROM ONE GRADE TO ANOTHER; THE COMPARATIVE MERITS OF SUMMER VS. WINTER PROJECTS; THE COMPARATIVE MERITS OF HIGHLY STRUCTRUED VS. A GENERAL ENRICHMENT, RELATIVELY UNSTRUCTURED APPROACH; AND, WAYS OF DETERMINING HOW VERY SMALL ALLOCATIONS OF FUNDS CAN BE MOST EFFECTIVELY USED.

PROGRAM MODIFICATION

SUMMARY OF FINDINGS

* *Evaluation reports rarely included recommendations for program modification; evaluation procedures were seldom used as feedback system for immediate modification*

* *Evaluation reports were not widely disseminated; few teachers received them*

* *Title I practices are having an effect on regular school teaching methods, but more systematic communication is needed*

* *The evaluation component of most projects did not undergo any evaluation itself, there being a general lack of evaluation expertise on local staffs*

* *There were no cost-effectiveness systems employed in the projects*

RECOMMENDATIONS

(Recommendations 20 and 21 are high priority and are contained in "Four Critical Courses of Action.")

(22) THAT THE STATE DEPARTMENT TITLE I OFFICE PROVIDE TITLE I PROJECT PLANNERS WITH GUIDELINES FOR SETTING UP MODIFICATION PROCEDURES IN RESPONSE TO AN ON-GOING FEEDBACK PROCESS MAINTAINED AS A TEACHING STAFF AND ADMINISTRATIVE RESPONSIBILITY.[40]

(23) THAT PROJECTS BE ENCOURAGED TO INCREASE COMMUNICATION BETWEEN TITLE I AND NON-TITLE I PERSONNEL IN REGARD TO SPECIFIC TITLE I CHILDREN SO THAT BETTER CONTINUITY OF PROGRAMMING CAN BE MAINTAINED.

A substantial portion of educational programming in the public school system goes unevaluated. Yet there is no good reason why it, too, should not be evaluated. If it were, it could help to provide useful perspectives on Title I programs, while at the same time supplying the means for its change and improvement. For this reason we recommend:

(24) THAT EVALUATION REPORTS BE DISSEMINATED TO THE REGULAR SCHOOL SYSTEM'S PERSONNEL AS WELL AS TO ALL MEMBERS OF THE PROJECT STAFF SO THAT ADOPTION OF EFFECTIVE TITLE I METHODS AND MATERIALS MAY BE ENCOURAGED IN THE REGULAR SYSTEM;[41] and,

(25) THAT THE STATE DEPARTMENT OF EDUCATION BEGIN TO ENCOURAGE SCHOOL DISTRICTS TO EVALUATE THEIR REGULAR PROGRAMS, DRAWING ON THE EXPERIENCE OF TITLE I PERSONNEL.

In the 1968 report on Title I compiled by the Title I Office of the State Department, a note was made that there was no way to "draw conclusions about the relationships between project cost and project effectiveness."[42] Yet this is an important part of evaluation and cannot be ignored. We therefore recommend:

(26) THAT THE STATE DEPARTMENT GIVE SOME CONSIDERATION TO

COST-EFFECTIVENESS[43] AND TO LONG-RANGE PLANNING INVOLVING THE DEVELOPMENT OF ACCOUNTING SYSTEMS FOR TITLE I PROJECTS IN ACCORDANCE WITH NEW METHODS OF PROGRAM BUDGETING.[44]

PART II: PROJECT STAFFING, TRAINING, AND CURRICULUM

STAFF CHARACTERISTICS, SELECTION, AND RECRUITMENT

SUMMARY OF FINDINGS

* *26% of projects (out of 39 from which data were available) had teaching experience with disadvantaged children, but no specific training congruent with Title I assignments*
* *About half of the project directors assumed that responsibility as an added duty (no release time for it)*
* *42% of the projects used teacher aides and/or other para-professionals as part of the support staff; such staff rarely had any significant amount of training*
* *While minority group representation on the staffs of programs serving minority groups was given some consideration, more attention in this area is needed.*
* *On the whole, Title I project staffs are comprised of devoted educators who have a positive attitude about the work they are doing, though attitudes related to expectations of pupil performance could be improved*

RECOMMENDATIONS

If programming is to be effective, objectives must be matched by resources adequate to carry them out. If resources are scarce or limited, it is more worthwhile to pick one single objective of high priority and allocate all available resources to achieve it than to spread resources so thinly that nothing is accomplished. Our data indicate that insufficient attention has been given to this problem. We therefore recommend:

(27) THAT WHEN PROPOSALS ARE REVIEWED MORE ATTENTION BE GIVEN TO THE RELATIONSHIP BETWEEN PROGRAM OBJECTIVES AND STAFFING PATTERNS WITH PARTICULAR REFERENCE TO THE NEED FOR FULL-TIME PROGRAM DIRECTORS AND/OR REALISTIC AMOUNTS OF RELEASE TIME, BOTH FOR PLANNING AND IMPLEMENTATION, PARTICULARLY IN THE CASE OF LARGER PROJECTS.

During the last few years some effort to determine the effectiveness of teacher aides has been made. The Bank Street College of Education study identified multiple benefits.[45] Our data indicate that we are deprived of some of those benefits because of legal restrictions placed on the functions of aides. We recommend:

(28) THAT THE STATE DEPARTMENT OF EDUCATION CONSIDER THE FORMULATION AND INTRODUCTION OF LEGISLATION WHICH

WOULD EXTEND THE FUNCTIONS OF A TEACHER AIDE SO THAT THESE KINDS OF SUPPORT PERSONNEL CAN BE MORE EFFECTIVELY USED IN HELPING THE TEACHER TO MANAGE THE TEACHING/LEARNING PROCESS. THESE EXTENDED FUNCTIONS SHOULD CERTAINLY INCLUDE, BUT NOT BE LIMITED TO, READING TO THE CHILDREN, LISTENING TO THEM READ AND CORRECTING THEIR MISTAKES, AND ASSISTING STUDENTS GENERALLY IN WORKING WITH ANY KIND OF PROBLEM, ALL UNDER THE DIRECT SUPERVISION OF THE TEACHER TO WHOM THE AIDE IS ASSIGNED.[46,47,48,49]

Because significant emotional support from staff and attitudes reflective of positive expectations are so critical to the performance of disadvantaged children, having those kinds of attitudes and the capacity to give that kind of support should be an important selection criterion for Title I staff. Although our data do not reveal a critical problem in this area, it still needs to be emphasized and we therefore recommend:

(29) THAT THE STATE DEPARTMENT TITLE I OFFICE FIND WAYS OF ENCOURAGING PROJECT ADMINISTRATORS TO HIRE MINORITY GROUP MEMBERS FOR TITLE I PROJECTS, PARTICULARLY IN THE CASE OF PROGRAMS SERVING POPULATIONS WHICH INCLUDE SUCH MINORITY GROUPS AND TO GIVE SERIOUS CONSIDERATION TO ATTITUDES TOWARDS THE DISADVANTAGED ON THE PART OF ALL APPLICANTS.[50]

PRE-SERVICE AND IN-SERVICE TRAINING

SUMMARY OF FINDINGS

* *Less than half of the projects had pre-service for their staff members*
* *Over half of the projects reported no in-service training*
* *What staff training there was frequently did not focus directly on project objectives and usually lasted only one or two days*

COMMENDATIONS

(30) THAT SCHOOL DISTRICTS BE REQUIRED TO PROVIDE EVIDENCE IN THEIR PROPOSALS THAT STAFF MEMBERS HAVE THE EXPERIENCE NECESSARY TO TEACH IN TITLE I PROGRAMS IN TERMS OF THE OBJECTIVES AND REQUIREMENTS OF THE PROJECT AND/OR THAT ADEQUATE PROVISION IS MADE FOR PRE- AND IN-SERVICE TRAINING;

(31) THAT IN CASE OF PROJECTS UTILIZING TEACHER AIDES, THEY RECEIVE TRAINING SPECIFIC TO THE ROLES THEY ARE EXPECTED TO PERFORM, AND THAT TEACHERS BE TRAINED IN HOW TO SUPERVISE AND WORK WITH AIDES;[51]

(32) THAT STUDY OF THE EVALUATION OF THE PREVIOUS YEAR'S

PROGRAM BE MADE A REGULAR PART OF THE PRE-SERVICE TRAINING OF STAFF MEMBERS OF ANY CURRENT YEAR; AND,

(33) THAT PRE-SERVICE TRAINING INCLUDE DEVELOPING A THOROUGH KNOWLEDGE OF THE EVALUATION ASPECTS OF THE PROJECT AND THE SPECIFIC OBJECTIVES OF THE PROGRAM IN TERMS OF BEHAVIORAL OUTCOMES.

LEARNING HOW TO LEARN--DEVELOPING EFFECTIVE LEARNERS

SUMMARY OF FINDINGS

* *Such abilities as recall, comprehension, application, analysis, synthesis, evaluation, convergent and divergent thinking were required of students in varying degrees, but practically nothing was done to teach these processes of dealing with information*
* *50% of the projects considered listening, observing, following directions, vocabulary and word reasoning,and speech as most important, while*
* *Recording, attending behavior, test taking skills, study habits and visual discrimination skills were considered as relatively important, and*
* *25% of the projects listed problem solving, participation in social groups, and information seeking behavior as least important*
* *No project placed a major emphasis on teaching students how to learn by focusing on a development of the above kinds of skills and capacities*

RECOMMENDATION

(The recommendation pertaining to this subsection, no. 34, is considered a high priority recommendation and appears in "Four Critical Courses of Action," page 8.)

MOTIVATIONAL ASPECTS OF THE PROGRAM

SUMMARY OF FINDINGS

* *45% of projects from which data were available made efforts to individualize prescriptions for learning*
* *Less than half the projects identified weaknesses or strengths in ways that would enable a program to be geared to either or both*
* *25% of the projects indicated that they had given consideration to students' interests as a means of insuring motivation*
* *33% of the projects reported that experiential background of students was considered when curriculum was planned*
* *72% of the projects took ability into consideration when planning curriculum*
* *74% of projects had no curriculum materials which made favorable reference to ethnic minorities*
* *Most of the projects used materials organized in short sequential steps to facilitate learning*
* *Half of the projects provided for continuous and immediate success experiences*

* *55% of the projects made a conscious use of reward and punishment as a means of increasing motivation*

* *Less than a third of the projects made any attempts to analyze student self-concepts with a view towards improving them*

* *Games, dramatics, etc., were used by many projects but the motivational potentialities of participation in art activities were generally overlooked*

* *Practically all projects used a wide variety of special materials*

RECOMMENDATIONS

Individualization of instruction is one of the most basic responses to the need for disadvantaged children to achieve at a rate above the norm. Much of the Title I instruction, particularly in the summer projects, reflected an acceptance of this principle. It was also evident that the State Department Title I Office had made efforts to hold the line on numbers of children being served so that teaching efforts could be individualized as much as possible and not diluted to a point where the teaching approach could not take individual pupil needs into consideration. However, more encouragement for improving the quality of individualized instruction is needed. Few teachers have been trained to teach on this basis; yet, to be effective in the approach, techniques different from those used in teaching larger classes must be employed. We therefore recommend:

(35) THAT AN INCREASED EMPHASIS BE PLACED ON THE INDIVIDUALIZATION OF INSTRUCTION, PARTICULARLY DURING THE WINTER PROJECTS, AND THAT INCLUDING INFORMATION AND PRACTICA ON HOW TO INDIVIDUALIZE INSTRUCTION BE ENCOURAGED AS PART OF PRE-SERVICE AND IN-SERVICE TRAINING OF TITLE I STAFF.

The motivational and cognitive needs of disadvantaged youngsters have direct implications for both curriculum development and teacher training.[52] Our data show that the many considerations related to these needs are familiar to most Title I personnel, but not thoroughly enough to be translated into curricular changes and teaching methods that are maximally effective. It is certain that the level of competence required to achieve the objectives of compensatory education cannot be attained through a few workshops and/or several hours of pre-service or in-service training. However, until long-term training programs are developed by universities (which have only begun to assume this critical responsibility), an improved short pre-service training will have to suffice.[53] We suggest:

(36) THAT THE STATE DEPARTMENT TITLE I OFFICE, POSSIBLY IN COLLABORATION WITH PRIVATE OR PUBLIC INSTITUTIONS CONCERNED WITH EDUCATION OF THE DISADVANTAGED, PROVIDE ASSISTANCE TO LOCAL PROJECTS IN DEVELOPING CUR-

RICULA THAT ARE BASED ON STUDENT NEEDS, INTERESTS, AND EXPERIENTIAL BACKGROUND SO THAT MAXIMUM MOTIVATIONAL SUPPORTS ARE PRESENT WITHIN THE CURRICULUM; AND,

(37) THAT PROJECT PLANNERS AND DIRECTORS BE ENCOURAGED TO CONSIDER THE MERITS OF THE VISUAL ARTS, MUSIC, DANCE, AND THEATRE ARTS AS A MEANS OF MAINTAINING HIGH LEVELS OF INTEREST AND MOTIVATION, FOSTERING COGNITIVE AND PERCEPTUAL GROWTH, AS WELL AS DEVELOPING AESTHETIC SENSITIVITY.[54]

Since relevance of materials is a supportive factor in sustaining motivation, children who belong to minority groups must be able to identify with some aspects of the subculture from which they come as represented in curriculum materials. Given the diversity of the people comprising our society and our commitment to democracy, such representation is also relevant to children who do not belong to a minority group. We therefore recommend:

(38) THAT LOCAL PROJECTS BE ENCOURAGED TO INVEST IN READING AND VISUAL MATERIALS THAT MEANINGFULLY REPRESENT MINORITY GROUPS, WHETHER OR NOT THERE ARE MINORITY GROUP MEMBERS PRESENT IN THE PROJECTS OR ON PROJECT STAFFS.

PARENTAL, HOME, AND COMMUNITY INVOLVEMENT

SUMMARY OF FINDINGS

* *62% of projects from which data were available had not taken into consideration the influence of the home on the learning of Title I students in the way in which the program was set up*
* *In over half the projects parents were not actively involved*
* *66% of the projects from which data were available indicated no community involvement*

ECOMMENDATIONS

The American Institutes of Research in a study designed to dentify features of a "successful" compensatory education pro-ram listed active parental involvement as one very important actor.[55] Research has also demonstrated the influence of sig-ificant others, particularly parents, can have on school per-ormance. Our data show a need to strengthen this aspect of itle I programs. The trend to increase parental and community nvolvement because of their promise for supporting educational bjectives effectively is consistent with our recommendation:

(39) THAT PROJECT PLANNERS BE ENCOURAGED TO INVOLVE PARENTS AND COMMUNITY IN TITLE I PROJECTS TO A MUCH GREATER DEGREE THAN PRESENTLY EXISTS AND THAT PROPOSALS BE REQUIRED TO SPECIFY THE NATURE OF INVOLVEMENT ON ALL

LEVELS: PLANNING, IMPLEMENTATION, AND EVALUATION;

(40) THAT SCHOOL DISTRICTS BE ENCOURAGED TO CONSIDER EDUCATIONAL AND SOCIAL SERVICES FOR PARENTS AS PART OF THE TITLE I PROGRAM AND THAT SUCCESSFUL EFFORTS IN THIS AREA BE DISSEMINATED TO OTHER PROJECTS; AND,

(41) THAT PROJECT DIRECTORS BE MADE RESPONSIBLE FOR DISSEMINATING INFORMATION ABOUT THEIR PROJECTS TO PARENTS AND APPROPRIATE COMMUNITY AGENCIES ON A REGULAR BASIS.

(Recommendations 42 and 43 are high priority recommendations and can be found on pages 16 and 18 respectively.)

THE GENERAL RECOMMENDATIONS

With so many unforeseen and uncertain contingencies on which federal funding rests, we recommend:

(44) THAT THE STATE DEPARTMENT OF EDUCATION BEGIN TO ENCOURAGE SCHOOL DISTRICTS TO ASSUME PROGRESSIVELY MORE RESPONSIBILITY FOR FINANCING COMPENSATORY EDUCATIONAL SERVICES AS A PART OF THEIR REGULAR SCHOOL BUDGETS.[56]

Our survey data indicate that there are over 30,000 children in the Commonwealth who need compensatory services but aren't getting them. This represents a growing liability to the State which will be a far more costly problem to deal with when these children become adults. We recommend:

(45) THAT LEGISLATION BE ENACTED TO APPROPRIATE STATE FUNDS TO SUPPLEMENT THE FEDERAL FUNDS FOR OVER 30,000 CHILDREN NEEDING COMPENSATORY SERVICES WHO ARE NOT NOW RECEIVING THEM AND FOR SETTING UP PROGRAMS TO TRAIN EVALUATION SPECIALISTS AND COMPENSATORY EDUCATION PERSONNEL.

Many programs have similar objectives and problems. Without exchange of information among them, there is a duplication of effort and an unnecessary repetition of unsuccessful approaches. We therefore recommend:

(46) THAT THE STATE DEPARTMENT OF EDUCATION HELP TO PROVIDE A GREATER DEGREE OF COORDINATION AMONG ALL COMPENSATORY EDUCATION PROGRAMS (HEADSTART, FOLLOW THROUGH, UPWARD BOUND, TEACHER CORPS, NEIGHBORHOOD YOUTH CORPS, ETC.) THROUGH SUCH MEANS AS DISSEMINATION OF INFORMATION, SPONSORING CONFERENCES, AND WORKING DIRECTLY WITH THE DIFFERENT PROGRAMS TO BRING THEIR PERSONNEL TOGETHER FOR CONSULTATION ON MUTUAL PROBLEMS.

Our data show that most of the Title I programs include children in the early grades. On the strength of many research findings which point out how certain early experiences are crucial to later learning, we believe that even more emphasis should be placed on reaching the very young. We therefore recommend:

(47) THAT THE STATE DEPARTMENT OF EDUCATION ADOPT A GENERAL POLICY OF GIVING PRIORITY TO THE PREVENTION OF LEARNING DIFFICULTIES RATHER THAN ON REMEDIATION AND THAT CONCRETE STEPS BE TAKEN TO EXPAND PRE-SCHOOL PROGRAMS AND THE TRAINING OF SPECIALISTS IN EARLY CHILDHOOD EDUCATION.

Finally, because such study documents as this are frequently filed and forgotten after a short time, we recommend:

(48) THAT THE STATE DEPARTMENT OF EDUCATION SET A DATE FOR AN ANNUAL REVIEW OF ALL RECOMMENDATIONS UNTIL THOSE WHICH ARE FOUND TO BE BOTH ACCEPTABLE AND FEASIBLE ARE CARRIED OUT AND THAT SOME APPROPRIATE OFFICE OR AGENCY BE CHARGED WITH THE RESPONSIBILITY OF THE REVIEW.

IMPLEMENTATION OF THE RECOMMENDATIONS

Given the abundant endowment of educational resources in the Commonwealth and its impressive history and tradition of educational leadership, high expectations for action based on these recommendations are justified. But action arising out of recommendations is not likely to occur unless specific people, agencies, and institutions see what roles they have to play in effecting change and accept responsibility for doing something about it. The intent of the following suggestions is to help clarify roles and responsibilities of different agencies and institutions in the State in regard to the implementation of the recommendations of this study.

State Department of Education: There is no way to escape the conclusions:

(1) That strong leadership in the State Department of Education is absolutely essential to the successful implementation of the recommendations of this document, and

(2) That without implementing these recommendations there is no hope of providing equal educational opportunities to the State's disadvantaged children.

No other agency in the State is in such a favorable and strategic position to effect educational change.

Recommendations of primary concern to the State Department of Education:

Numbers 3, 5, 8, 10 17, 24, 25, 26, 28, 29, 43, 44, 45, 46, 47, 48.

One of the most critical functions of State Department leadership is to work around the inevitable resistance to the proposed changes at whatever levels or positions this resistance may manifest itself. A promising way to achieve this is to invest resources in those parts of the system that are least resistant or actively ready for change in a way that will produce new models which can be shown to work better than the old ones. Something that works better tends to sell itself and wins acceptance. This is essentially the approach we are recommending. To do this, however, will require several kinds of initiative and support from the State Department of Education:

1. Allocation of financial resources needed to strengthen the position and work of those who are willing and able to develop new models of compensatory education. (In the case of Title I and other federally funded programs, a considerable amount of financial support could be made available without even increasing the current budget simply by using all that has been allocated rather than sending back large unused amounts to Washington.)

2. Coordination of the efforts of those who have a contribution to make toward the development and refinement of new models (i.e., professionals working in Headstart, Follow-Through, Upward Bound, Neighborhood Youth Corps, etc.).

3. Introduction of the model(s) in selected localities where the needs are great and maximum visibility is

possible and dissemination of information concerning successful approaches to programs with related objectives.

4. Formulation, introduction, and support of legislation that will be required to legalize some changes and provide supplementary financial resources from the State to meet the needs of the disadvantaged.

Particular agencies within the State Department have especially significant roles to play. The Title I office is perhaps the most important office within the State Department for effecting change in compensatory education because it has the power to implement a large number of the recommendations directly. Where resources needed to carry out a given recommendation are not available from the Title I office itself, it can assume the responsibility for involving other agencies or institutions which can provide whatever is required. In many instances, the Title I office can also put local projects in touch with sources of needed expertise and encourage them to use their budgets in imaginative ways. Since this office is responsible for reviewing proposals for funds and approving or disapproving them, it is in a position both to provide guidance and encourage compliance with requirements, particularly those concerned with evaluation (See Appendix VIII, page 343, for a description of the functions and responsibilities of this office.)

Recommendations of primary concern to the Title I office of the State Department of Education:

Numbers 1 through 24
26 through 43
45, 47, 48

The Board of Higher Education should insist that schools of education in state colleges and universities give some priority to training compensatory education personnel and evaluation specialists to fill the manpower shortages in these areas. For the Title I office to require local school districts to plan and carry out adequate compensatory education programs and evaluate them when there is little or no trained manpower to do this is as unrealistic as it is unjust. In effect, it is an unenforceable requirement and so funds will inevitably continue to be spent on programs that are inadequately staffed. Yet, it is morally reprehensible for the State to continue accepting federal funds if it will not comply with the requirements of the Title I Legislation; and, it cannot comply with the intent of the legislation without the highly trained personnel needed to staff the projects. The Board of Higher Education can play an important part in getting institutions of higher learning to rise to this challenge.

Recommendations of primary concern to the Board of Higher Education:

Numbers 12, 14, 28, 34, 42, 43, 47, 48.

State Legislature: The appropriate committees of the State Legislature will need to collaborate with the State Department of Education and professional organizations in the State in introducing legislation that will provide the state funds needed to guarantee equal educational opportunities for all disadvantaged children, particularly for those many thousands of children not even reached

Recommendations of primary concern to the State Legislature:

Numbers 17, 25, 28, 44, 45, 47, 48.

by federally funded programs. This document itself can serve as one important source of information to members of the Legislature on the current status of compensatory education in the State. It is clear that the work to provide compensatory educational services to the disadvantaged children of the Commonwealth, initiated by the State through the Willis-Harrington Commission, has only begun. Carrying out the recommendations of this study will in the final analysis depend upon the active support of the Legislature. While the cost of carrying out these recommendations will be substantial, it will be far more economical than bearing expenses of the unmet educational needs of the disadvantaged when they develop into the costs of unemployment compensation, crime, delinquency, welfare, and the perpetuation of the cycle through the next generation--a perpetuation which guarantees a heavy burden on the tax payers in the future.

Colleges and Universities: University personnel have often been quick to criticize the inadequacies of compensatory education in the public schools and notoriously slow in developing appropriate curricula and training for the kinds of personnel needed to help the schools improve their programs. Given the responsibility that state colleges and universities have for staffing the public schools, they have no reason to wait for the State Department of Education to

Recommendations of primary concern to colleges and universities:

Numbers 1, 4, 6, 12, 14, 15, 16, 18, 19, 21, 29, 31 through 38, 43, 47.

insist that they provide pre-service and in-service programs for training evaluation specialists, compensatory education personnel, and specialists in pre-school or early childhood education. In addition, a far greater effort to carry out longitudinal research on the disadvantaged child and his educational needs has to be made and findings from research applied. Such programs on the college level would, because of their relevance to critical social issues, provide a legitimate means of capitalizing on the genuine idealism of many college students--an idealism that is so frequently expressed in unproductive ways because there appear to be no meaningful alternatives among traditional degree programs.

Local School Districts: A number of basic recommendations (such as refocusing project thrust by generating objectives consistent with the goal of developing competent learners, contracting out the evaluation responsibility to specialists if none are on the local staff, and providing a planned pre-service and in-service training program) can be implemented by local districts and project directors. As model programs are developed, some districts will want to experiment with them in collaboration with the educational institutions which have developed them. Local districts can also assume the initiative in getting more local resources allocated to compensatory education, including those available through community organizations, both public and private.

Recommendations of primary concern to local school district

Numbers 1, 2, 4, 6, 7, 8, 10, 12, 13, 18, 19, 23 through 27, 29 through 41, 43, 44, 46, 47.

Parents: Like many programs for the disadvantaged, very little Title I money goes into the pockets of the poor themselves. The $16 million for Title I in the State is used primarily to pay the salaries of middle-class teachers and administrators. Since the money has been appropriated to help the disadvantaged, most of whom are from low-income families, parents have a right and an obligation to insist that these appropriations are spent on programs which are effective in helping their children to become competent learners so that they can become successful performers in school, prepare for careers that will provide them with economic security as adults, and guarantee for their children a background free from serious disadvantages. If this is not happening, then disadvantaged children and their parents are, in blunt terms, being cheated out of something that is rightfully theirs. Most school systems will welcome the opportunity for more active parental participation in their compensatory education programs. Individual parents and parent organizations should not lose the opportunity to find ways of supporting the efforts the schools are making to brighten the prospects of their children's future.

Recommendations of primary concern to parents:

Numbers 1, 10, 24, 29, 31, 36, 38, 39, 40, 41, 44, 47.

Educational and Professional Organizations: Contributing to the growth of the education professions by increasing the quality and relevance of their training and research programs is a primary objective of most educational and professional organizations. Such

organizations can use their influence to help obtain the resources needed to establish model compensatory education projects and the model programs needed to train their staffs. They can do this by helping to disseminate information about them and working to achieve the support of their members and their representatives and colleagues in the Legislature and government agencies.

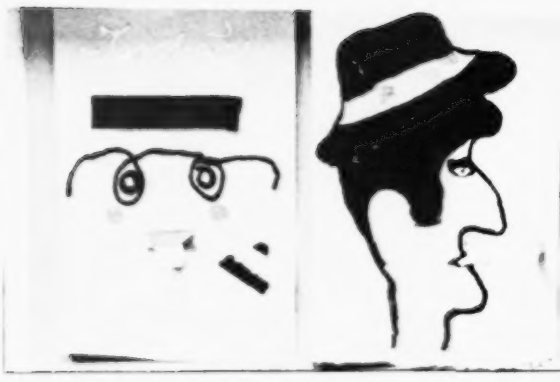
Recommendations of primary concern to educational and professional organizations:

Numbers 19, 24, 28, 31, 34, 37, 38, 42, 43, 45, 47.

Business and Industry: Business and industry can support the proposals made in this document not only by direct financial contribution, but also by developing new curriculum materials and equipment designed to serve the needs of the disadvantaged. They can be particularly effective when the materials they produce represent an application of research findings concerning the education of the disadvantaged. In many cases, business can undertake its own research and speed up the acquisition of important knowledge about teaching the disadvantaged. Business can also provide a critical service by developing models for determining cost-effectiveness of compensatory education programs. Because the task is so great and financial resources always limited, it is doubly important to have sound evaluation components in all programs coupled with some kind of cost-effectiveness determination so that replanning cycles are based on relevant data.

Recommendations of primary concern to business and industry:

Numbers 17, 18, 26, 36, 37, 38, 45, 47.



MODEL PROGRAM FOR TRAINING COMPENSATORY EDUCATION PERSONNEL

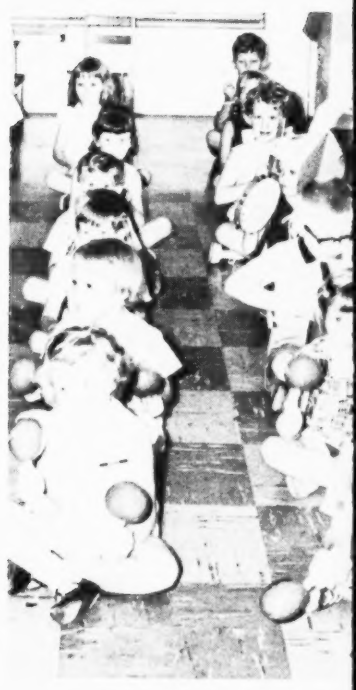
Universities have been slow to train a variety of compensatory education personnel as such. Instead, they have offered a few isolated courses on teaching the disadvantaged for those who have cared to take them. Given the magnitude of the problem and the shortage of manpower, this is a woefully inadequate response. Every major study on the disadvantaged underscores the necessity for launching a massive attack on the problem, not by piecemeal efforts, but by developing full-scale programs staffed by highly trained specialists and generalists.

Since no one type of specialist or generalist can possibly fulfill all the needs of disadvantaged youngsters, particularly where there are large numbers to be served, the program we propose is designed to prepare a variety of personnel who can be employed to work as members of a differentiated staff.[57]

Any program staff (e.g., a Title I program staff) may be differentiated in a number of different ways, depending on needs, objectives, and available resources. In whatever way this is done, however, the tasks to be performed and the staff roles which they define should be directly supportive of the major objective of compensatory education: development of competent learners who will be able to "catch up" and stay "caught up."[58]

Characteristics of the Competent Learner: To grasp the context of the training program and in order to determine whether or not the ultimate objective of the model (developing competent learners) is being achieved, it is essential to have a fairly accurate notion of what such learners are like. How to learn is itself a learned process. All learning is not equally germane to that process. Generally speaking, the more that is germane to that process a person is able to learn, the more competent he will be as a learner.[127]

An ineffective learner is one whose accumulated learning precludes, inhibits, slows up or places limitations on the rate and scope of present and future learning. The important point here is this: that disadvantaged students simply given information in subject matter areas (math, science, biology, etc.) as remedial work and perhaps a variety of cultural enrichment experiences to supplement it, but no information and experience that will enable them to master the learning process itself--such students have no hope of "catching up" and staying "caught up." Although temporary gains may be made through remedial efforts, there is no efficient way of consolidating those gains and converting them into permanent assets without mastering the fundamentals of the learning process itself. The unique feature of the model is that it prepares teachers to teach subject matter areas simultaneously with how to learn every step of the way.



The following outline of the capacities which constitute learning competence is general and incomplete.[128] It is presented here in brief form only as a means of focusing attention on the kind of student the educational program should be helping to develop. Eventually these capacities will have to be translated into specific behavioral terms so that persons helping to manage the learning process will be able to analyze the continual feedback such behavior represents for the purpose of introducing those modifications needed to keep the program serving its basic objective effectively.

The competent learner is one who progressively improves his capacity:

(MOTOR) 1. To coordinate, control, and direct the movement and position of voluntary muscles

(PERCEPTUAL) 2. To perceive with reasonable speed and accuracy through all sensory modes

- a. Be aware (receptive to stimuli)
- b. Discriminate among stimuli on a given dimension
- c. Select out irrelevant stimuli and attend to those of interest to the activity at hand (concentration)
- d. Organize and interpret stimuli in preparation for reaction

(COGNITIVE) 3. To think

- a. Memorize (store and retrieve information)
- b. Conceptualize

(1) Label events, ideas, of objects (vocabulary development--this includes handling the symbolic systems of language and math)

(2) Categorize or classify them (establish criteria and apply them)

(3) Name categories, identify them, and utilize them

c. Translate from one symbolic form to another

d. Interpret data

e. Extrapolate and interpolate information

f. Apply principles

g. Analyze data

h. Synthesize data (cognize units)

i. Speculate (using fantasy, imagination and intuition)

j. Form and test hypotheses

k. Transfer knowledge

(AFFECTIVE) 4. To control and manage feelings and emotions

a. Bring feelings under rational control[129] (impulse control, particularly)

b. Organize feelings (values system formation) so they are supportive of actions which foster continued growth--curiosity

and courage, for instance, are in part symptomatic of such organization

c. Develop commitments which give consistency and efficiency to patterns of development and growth (usually culminating in habits which maintain health at optimum levels and selection and pursuit of one's "life's work")

(VOLITIONAL) 5. To will or intend and carry intentions through to conclusions

a. Initiate action (usually for purpose or goal)

b. Persevere (break major goal down into small units and work towards the achievement of each one)

c. Effect closure or consummate action (achieve goal)

(MORAL) 6. To be reliable and be responsible for actions concerned with human relationships (this rests on the development of a moral sense which leads to behavior and attitudes that are supportive of others' growth and attracts reciprocation of similar attitudes and supportive action)

(AESTHETIC) 7. To appreciate order

a. Apprehend order, grasp the Gestalt of things

b. Have a sense of humor (appreciate a surprising or unanticipated arrangement or order of things)

c. Create (bring a new level of order among parts of things, events, people or ideas)

d. Strive to understand order in ultimate terms, including one's relationship to the universe (apprehension of beauty and ultimate purpose)

It is important to note here that the capacities are all interrelated and interdependent. The language capacity in particular operates on all levels and is necessary, but probably not sufficient, to the achievement of full growth on each level. It should also be noted that enough research has been carried out on psycho-motor, cognitive, and affective development to provide a reasonably sound basis for planning and implementation of these aspects of the model. Little research has been carried out on the volitional, moral, and aesthetic areas. However, some aspects of these areas (psychology of intention and perseverance; social or human relation skills; and, the kinesthetic, affective and cognitive aspects of the arts, respectively) have been explored enough to include them as potentially fruitful areas for experimentation.

Structure and Function of a Model Compensatory Education Program: The kinds of personnel to be produced by the program we propose will, as indicated earlier, be trained to manage the teaching-learning experience (toward the end of developing competent learners) most effectively within the framework of an educational system characterized by a differentiated staffing structure. The following

organizational chart represents one possible compensatory education model with such a staffing pattern (see page 63).**

This model and the training program outlined for its staff are both equally applicable to the education of non-disadvantaged students. The way the model works for disadvantaged children differs from the way it works for non-disadvantaged children in that for the former, the diagnostic procedures will identify culturally related deficits and disadvantages which will then have particular experiences prescribed to compensate for them. Methods and approaches of handling discipline, of involving the home and community, and of developing curriculum will vary as the characteristics of the population being served vary.

In the following pages, the main features of the model are specified by:

(1) Designating basic positions in the structure of the model;

(2) Defining the role associated with each position in terms of tasks and the competencies required to perform them; and,

(3) Prescribing the content of training needed to develop those competencies

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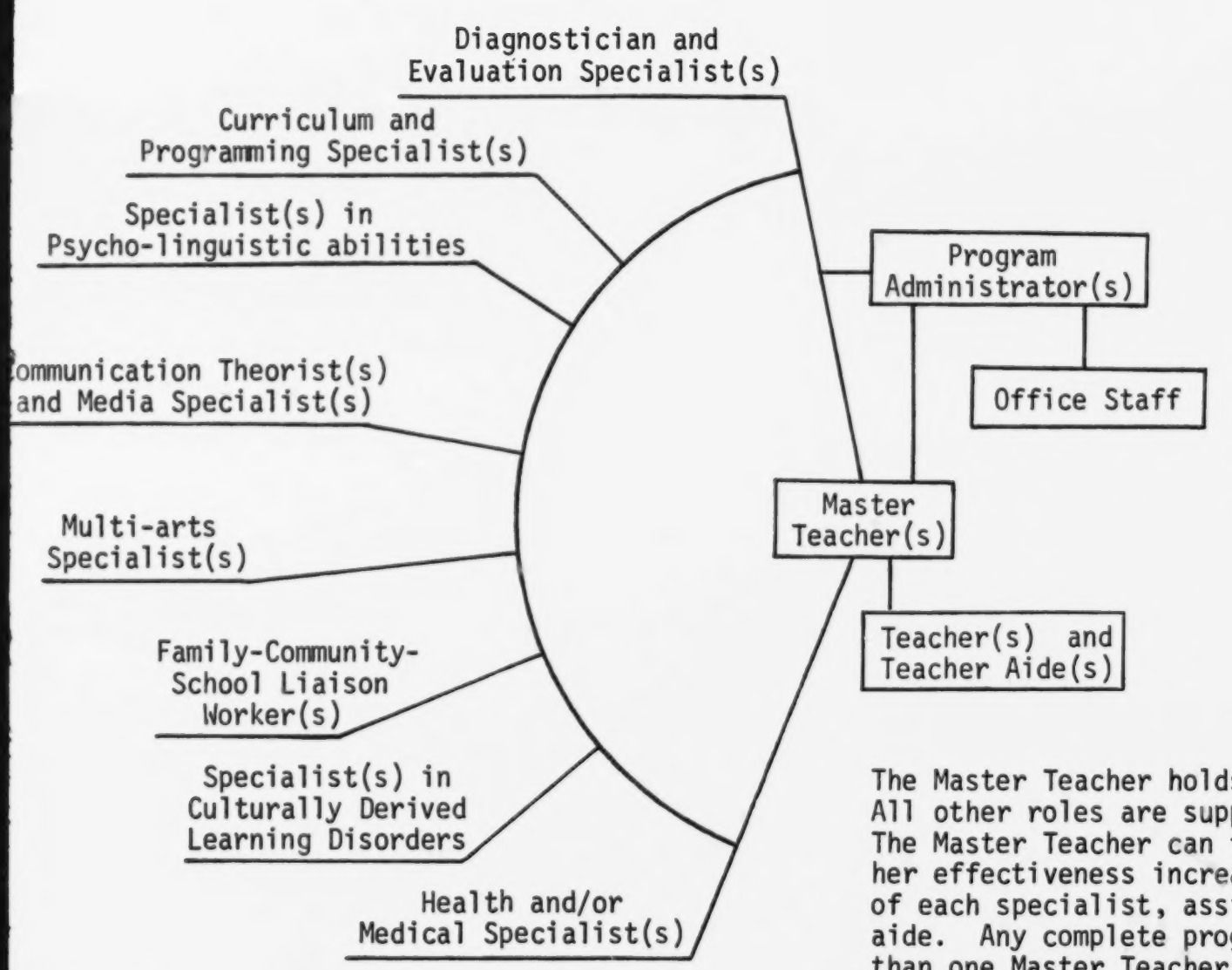
** Both the model and the training program for staff positions described by the model were prepared by the author for ANISA (American National Institutes for Social Advancement) and appears here by their permission. ANISA is an incorporated not-for-profit organization devoted to the establishment of educational programs for populations which face difficult problems in growth and development. ANISA programs are based on a concept of education broadly defined as the process by which human potential is released or developed.[59]

In this context, POSITION refers to place in a structure; ROLE refers to behaviors associated with a given position. The tasks specified indicate ROLE or what a person occupying a given POSITION should be able to do. *The tasks therefore represent the kinds of* competencies expected of someone occupying any given position.

In a good working model, positions are arranged in such a way (structure) that all the roles (function) achieve objectives (purpose) in the shortest amount of time utilizing the least amount of resources possible (efficiency). A good administrator is therefore one who can keep structure and function serving purpose with efficiency.

For the sake of brevity, the complete specifications of the model are not included here. For instance, the relationships among the different staff positions are not spelled out, the specialist functions themselves have not been differentiated, nor the question of pay scales considered. The degree and kind of differentiation possible depends on resources and program objectives. In general, the more students served, the more staff differentiation is possible and desirable. A diagnostician and evaluation specialist, for example, would be more effectively employed if there were several subordinate positions to his office to which such functions as giving tests, collecting data, punching computer cards, scheduling testing times and observation sessions, could be delegated, thereby

DIFFERENTIATED STAFFING ARRANGEMENT FOR MODEL COMPENSATORY EDUCATION PROGRAM



The Master Teacher holds the central position. All other roles are supportive of that role. The Master Teacher can function alone, but her effectiveness increases with the addition of each specialist, assisting teacher and aide. Any complete program will have more than one Master Teacher, each handling different curriculum areas, particularly on the secondary school level, supported by assisting teachers and aides.

freeing the specialist to use his expertise and time in more important ways. Furthermore, to pay a specialist's salary for services that can be competently performed by an assistant who requires less training and/or for clerical work is an uneconomical use of funds.

Selection and Recruitment for Training: In a fully developed model, criteria for selecting persons into a training program for any given position would be specified. This is extremely important, since some people, by virtue of the background they bring to the training situation and a variety of personality characteristics they possess, are more likely to be successful than others. In other words, it is doubtful that training alone can "produce" a model staff member; this therefore makes selection an important determinant of the success of the training program.

Although a full set of selection criteria for each position is not included here, one basic point is worth emphasizing. Stamina plus a certain kind of social idealism are important selection criteria for this kind of work. Today, the young, who naturally tend to have a good deal of stamina, also have a spirit of genuine idealism, often with no effective means by which it might be expressed. Certainly, protests, sit-ins, and marches are limited in their power to inspire a "life's work" in some critical area of social need. Both the rigorous training program proposed here and the work for which

it prepares students require stamina and a sense of idealism. Such a program would attract a new "breed" of teacher and help infuse public education with new blood while at the same time filling a manpower shortage and providing a constructive means of channeling the energies of college students into work that is relevant, timely, challenging, and eminently worthwhile.

Training a Differentiated Staff for Competence: The model we propose can only work if the people occupying all the positions are fully competent in their roles. Our program is designed to provide the training that will help to insure such competence at reasonable levels.

A general core of knowledge will be essential to all the roles. As these roles are differentiated to serve special purposes, different kinds of knowledge and skills will have to be added to the general core. Content areas for training are briefly described on pages 87-99. Each description is designated by a number and a name. To conserve space and avoid lengthy duplication of descriptions, only the designations are used when indicating what content areas are prescribed for the training of staff members for given positions in the model. Not every staff member needs to be prepared in each area to the same degree. The number in parentheses at the end of the designations refers to the level of preparation recommended; the higher the number, the greater the depth of preparation indicated. For instance, the Master Teacher might need preparation on level (1) in curriculum theory whereas the curriculum specialist needs preparation on level (3).

Position(s)	MASTER TEACHER TEACHER*
Role (tasks and competencies)	Collaborates with other staff members in the planning for learning; generally manages the teaching-learning process; assumes instructional responsibilitie- in specific curriculum area(s) (math, music, social sciences, etc.); decides on the mode of instruction and selects appropriate media; supervises teachers and/or aides; calls on assistance of support staff as needed; participates in home-community-school activities arranged to provide experiential continuity for child; collaborates in evaluation of student performance, teacher performance, and program effectiveness; helps with in-service training of aides and students doing their practica as teacher interns; keeps abreast of new developments. (The assisting teacher may perform any number of the above roles depending on the ways the talents and skills of Master Teacher(s) and Teacher(s) complement one another.)
Training and Preparation**	1. Nature of the competent learner (3)*** 2. Culture and its relationship to perception and learning (1) 3. Kinds of learning and the conditions of learning (3) 4. How to plan for learning (1) 5. Practicum in techniques for developing perceptual speed and acuity (2) 6. Nature of cognition (3) 7. Memory (2) 8. Conceptual behavior (3) 9. Transfer of learning (3) 10. The nature of volition and perseverance--increasing the capacity to intend and carry something through to completion (1)

* The Teacher receives a training program similar to that of a Master Teacher, but may not achieve a high level of competency in all roles. Of course, with additional training or experience, he may become a Master Teacher.

** See pages 87-99 for descriptions of the training experiences listed.

*** Numbers in parentheses signify depth of training needed; the higher the number, the greater the depth required.

11. Management of feelings and emotions--principles of self-control (1)
12. Seminar in motivation (3)
13. Reward and punishment and the nature of encouragement (3)
14. Handling frustration and failure--identifying and individualizing learning experiences around strengths and interests (3)
15. Seminar and practicum in learning disabilities (1)
16. Anxiety and learning in compensatory education (1)
22. Practicum in selection of media and utilization of different presentation modes (2)
23. Techniques in the presentation of materials for individualizing instruction--utilizing the sequential hierarchy of content arrangement and the concrete to abstract approach (3)
24. Techniques in developing study skills, study habits, ability to take tests and follow direction (3)
25. Theories and methods of fostering creative potential (1)
26. Theories and techniques for establishing rapport (3)
27. The nature of curiosity and techniques for developing a demeanor of inquiry (3)
28. Compensatory education evaluation (1)
29. The principles of behavioral cybernetics applied to compensatory education (3)
32. Techniques of self-evaluation (3)
36. Practicum in utilization of non-professional personnel (3)
37. Practicum in the utilization of members of the peer group as teachers and planners (3)
38. Curriculum theory and curriculum development (1)
39. Training for specific curriculum area (3)
43. The nature-nurture controversy (1)
44. Race relations (1)

Position	ADMINISTRATOR
Role	Helps to select staff members for the program; collaborates with other staff members in planning, implementing, and evaluating the program and staff performance; generally responsible for administering the program, keeping priorities in mind; budgeting and cost-effectiveness accounting; ordering materials; supervising facilities; participates in home-community-school affairs; makes certain that Master Teacher role has full support from auxiliary staff; prepares reports on program and disseminates information to staff, students, and community; proposal writing and fund-raising.
Training and Preparation	1. Nature of the competent learner (2) 2. Culture and its relationship to perception and learning (2) 3. Kinds of learning and the conditions of learning (1) 4. How to plan for learning (3) 13. Reward and punishment and the nature of encouragement (2) 17. Theory and practicum in contingency management (1) 20. Developing moral behavior for supporting learning (1) 26. Theories and techniques for establishing rapport (2) 28. Compensatory education evaluation (3) 31. Tests and measurements for disadvantaged students (1) 32. Techniques of self-evaluation (1) 34. Supplementary services in compensatory education (2) 35. Practicum in preparation of home environments for cognitive stimulation (1) 36. Practicum in utilization of non-professional personnel (3)

42. Seminar in administration of compensatory education programs (3)
43. The nature-nurture controversy (1)
44. Race relations (3)
45. Desegregation and integration: factors in compensatory education (3)

Position	TEACHER OR STAFF AIDE

Role 1: Aides who are selected to work with "things"	Assist any staff member in any of the following ways:	
	filing	taking inventory
	typing	report writing
	collecting money	policing rooms and grounds
	taking attendance	ordering supplies
	keeping records	grading papers
	duplicating materials	driving or transporting
	audio-visual technician	goods, staff, or students

Role 2: Aides who are selected to work with children	Assist any staff member in any of the following ways:	
	playground supervision	helping to maintain discipline
	hall duty	supervise lunch room
	supervision of study	work with students in groups or individually on learning projects under supervision of staff member
	story-telling and reading	
	field trip chaperones	
	recreational activities supervision	
	assist in parent-home-community work	

Training	Much of this will be done as on-the-job training and may be preceded by a special pre-service experience related to one or both types of roles.

Position DIAGNOSTICIAN AND EVALUATION SPECIALIST

Role

Operate diagnostic clinic; provide student performance information for Master Teachers and curriculum specialists; keep performance records on each student; participate in program planning with other staff members; collaborate with learning disorders specialist in assessing student problems and devising solutions; direct the planning of the evaluation and the evaluation itself; supervise student interns.

Training and Preparation

The following courses are supplementary to a thorough training in tests and measurements, research design, and evaluation.

1. Nature of the competent learner (3)
2. Culture and its relationship to perception and learning (3)
3. Kinds of learning and the conditions of learning (3)
4. How to plan for learning (1)
5. Practicum in techniques for developing perceptual speed and acuity (3)
6. Nature of cognition (1)
7. Memory (1)
8. Conceptual behavior (1)
9. Transfer of learning (1)
10. The nature of volition and perseverance--increasing the capacity to intend and carry something through to completion (1)
11. Management of feelings and emotions--principles of self-control (1)
12. Seminar in motivation (1)

13. Reward and punishment and the nature of encouragement (1)
15. Seminar and practicum in learning disabilities (1)
28. Compensatory education evaluation (3)
29. The principles of behavioral cybernetics applied to compensatory education (2)
30. Techniques in the analysis of child behavior (3)
31. Tests and measurements for disadvantaged students (3)
32. Techniques of self-evaluation (3)
35. Practicum in preparation of home environments for cognitive stimulation (1)
44. Race relations (1)

Position	CURRICULUM AND PROGRAMMING SPECIALIST
Role	Assist Master Teachers in general programming and individualizing materials for students; assist Master Teacher in use of materials in class; help prepare materials for parents and for use by children at home; work with A-V specialist in creation of A-V materials; supervise programmed instruction and computer aided instruction; supervise student interns; participate in program evaluation.
Training and Preparation	1. Nature of the competent learner (3) 2. Culture and its relationship to perception and learning (3) 3. Kinds of learning and the conditions of learning (3) 4. How to plan for learning (3) 5. Practicum in techniques for developing perceptual speed and acuity (1) 6. Nature of cognition (3) 7. Memory (3) 8. Conceptual behavior (2) 9. Transfer of learning (3) 10. The nature of volition and perseverance--increasing the capacity to intend and carry something through to completion (1) 11. Management of feelings and emotions--principles of self-control (1) 12. Seminar in motivation (1) 18. Seminar in the development of self-image (3) 19. Role of humor, fun, and laughter in educating the disadvantaged (3) 20. Developing moral behavior for supporting learning (2)

21. Practicum in aesthetics in compensatory education (1)

22. Practicum in selection of media and utilization of different presentation modes (3)

23. Techniques in the presentation of materials for individualizing instruction--utilizing the sequential hierarchy of content arrangement and the concrete to abstract approach (3)

27. The nature of curiosity and techniques for developing a demeanor of inquiry (3)

28. Compensatory education evaluation (1)

31. Tests and measurements for disadvantaged students (1)

35. Practicum in preparation of home environments for cognitive stimulation (2)

37. Practicum in the utilization of members of the peer group as teachers and planners (1)

38. Curriculum theory and curriculum development (3)

40. Computer aided instruction for disadvantaged students (3)

44. Race relations (1)

Position	SPECIALIST IN PSYCHO-LINGUISTICS (AND READING)
Role	Collaborate with Master Teachers and curriculum specialists in planning and implementing programs in language development and reading; work with diagnostician and learning disorders specialist in creating special approaches for students with particular problems; maintain records on all students relative to progress in this area; supervise student interns; participate in program evaluation.
Training and Preparation	The following are supplementary to a thorough background in psychology and reading:

1. Nature of the competent learner (3)
2. Culture and its relationship to perception and learning (3)
3. Kinds of learning and the conditions of learning (3)
4. How to plan for learning (1)
5. Practicum in techniques for developing perceptual speed and acuity (3)
6. Nature of cognition (2)
7. Memory (2)
8. Conceptual behavior (2)
9. Transfer of learning (2)
11. Management of feelings and emotions--principles of self-control (3)
13. Reward and punishment and the nature of encouragement (2)
14. Handling frustration and failure--identifying and individualizing learning experiences around strengths and interests (3)

15. Seminar and practicum in learning disabilities (1)
16. Anxiety and learning in compensatory education (1)
19. Role of humor, fun, and laughter in educating the disadvantaged (1)
20. Developing moral behavior for supporting learning (1)
21. Practicum in aesthetics in compensatory education (1)
22. Practicum in selection of media and utilization of different presentation modes (1)
23. Techniques in the presentation of materials for individualizing instruction--utilizing the sequential hierarchy of content arrangement and the concrete to abstract approach (3)
24. Techniques in developing studyskills, study habits, ability to take tests and follow direction (1)
26. Theories and techniques for establishing rapport (3)
27. The nature of curiosity and techniques for developing a demeanor of inquiry (3)
28. Compensatory education evaluation (1)
29. The principles of behavioral cybernetics applied to compensatory education (3)
30. Techniques in the analysis of child behavior (1)
31. Tests and measurements for disadvantaged students (1)
32. Techniques of self-evaluation (1)
35. Practicum in preparation of home environments for cognitive stimulation (1)
37. Practicum in the utilization of members of the peer group as teachers and planners (3)
39. Training for specific curriculum area (3)

40. Computer aided instruction for disadvantaged students (1)
41. Seminar and practicum in psycho-linguistics (3)
44. Race relations (1)

Position — MEDIA SPECIALIST AND COMMUNICATIONS THEORIST

Role — Assist curriculum specialist and Master Teachers in planning most effective ways of presenting materials to be learned; create necessary audio-visual materials and supports; work with learning disorders specialist in individualizing programs and experiences for students facing particular problems; administer audio-visual services to all staff members; supervise student interns and/or aides; participate in program evaluation.

Training and Preparation — The following training is supplementary to a thorough background in educational media and technology:

1. Nature of the competent learner (3)
2. Culture and its relationship to perception and learning (3)
3. Kinds of learning and the conditions of learning (3)
4. How to plan for learning (3)
5. Practicum in techniques for developing perceptual speed and acuity (3)
6. Nature of cognition (2)
7. Memory (2)
8. Conceptual behavior (3)
9. Transfer of learning (3)
10. The nature of volition and perseverance--increasing the capacity to intend and carry something through to completion (2)
11. Management of feelings and emotions--principles of self-control (3)
12. Seminar in motivation (1)

19. Role of humor, fun, and laughter in educating the disadvantaged (3)

21. Practicum in aesthetics in compensatory education (2)

22. Practicum in selection of media and utilization of different presentation modes (3)

23. Techniques in the presentation of materials for individualizing instruction--utilizing the sequential hierarchy of content arrangement and the concrete to abstract approach (3)

24. Techniques in developing study skills, study habits, ability to take tests and follow direction (2)

25. Theories and methods of fostering creative potential (3)

27. The nature of curiosity and techniques for developing a demeanor of inquiry (3)

28. Compensatory education evaluation (1)

32. Techniques of self-evaluation (1)

35. Practicum in preparation of home environments for cognitive stimulation (1)

37. Practicum in the utilization of members of the peer group as teachers and planners (2)

38. Curriculum theory and curriculum development (1)

40. Computer aided instruction for disadvantaged students (3)

44. Race relations (1)

Position	MULTI-ARTS SPECIALIST
Role	To serve as resource in planning and implementing learning activities centered around an aesthetic mode of inquiry (music, theatre arts, dance, visual arts); coordinate efforts of different Master Teachers in these areas with those specializing in other curricular areas; supervise student interns and/or aides; participate in program evaluation.
Training and Preparation	The following are supplementary to advanced preparation in two or more of the art areas: 1. Nature of the competent learner (3) 2. Culture and its relationship to perception and learning (3) 3. Kinds of learning and the conditions of learning (3) 4. How to plan for learning (3) 5. Practicum in techniques for developing perceptual speed and acuity (3) 6. Nature of cognition (3) 7. Memory (2) 8. Conceptual behavior (2) 9. Transfer of learning (2) 10. The nature of volition and perseverance--increasing the capacity to intend and carry something through to completion (1) 11. Management of feelings and emotions--principles of self-control (3) 12. Seminar in motivation (3) 13. Reward and punishment and the nature of encouragement (1)

14. Handling frustration and failure--identifying and individualizing learning experiences around strengths and interests (1)

19. Role of humor, fun, and laughter in educating the disadvantaged (1)

20. Developing moral behavior for supporting learning (1)

21. Practicum in aesthetics in compensatory education (3)

22. Practicum in selection of media and utilization of different presentation modes (1)

23. Techniques in the presentation of materials for individualizing instruction--utilizing the sequential hierarchy of content arrangement and the concrete to abstract approach (2)

25. Theories and methods of fostering creative potential (3)

26. Theories and techniques for establishing rapport (1)

27. The nature of curiosity and techniques for developing a demeanor of inquiry (2)

28. Compensatory education evaluation (1)

32. Techniques of self-evaluation (1)

35. Practicum in preparation of home environments for cognitive stimulation (1)

36. Practicum in utilization of non-professional personnel (1)

37. Practicum in the utilization of members of the peer group as teachers and planners (2)

38. Curriculum theory and curriculum development (1)

39. Training for specific curriculum area (3)

44. Race relations (1)

Position	FAMILY-COMMUNITY-SCHOOL LIAISON WORKER
Role	Collaborate with other staff members in planning parts of program relative to home and community involvement; work with parents and/or relatives in preparation of home environments so that they support educational objectives; follow-up on referral services with community agencies; facilitate communication among parents, school people, students and community; help to mobilize home-school-community resources to help solve student problems; supervize student interns and/or aides; participate in program evaluation.
Training and Preparation	The following courses are supplementary to the kind of general background provided traditionally for social workers: 1. Nature of the competent learner (3) 2. Culture and its relationship to perception and learning (3) 4. How to plan for learning (1) 6. Nature of cognition (1) 7. Memory (1) 8. Conceptual behavior (1) 9. Transfer of learning (1) 10. The nature of volition and perseverance--increasing the capacity to intend and carry something through to completion (1) 11. Management of feelings and emotions--principles of self-control (1) 12. Seminar in motivation (3) 13. Reward and punishment and the nature of encouragement (3)

14. Handling frustration and failure--identifying and individualizing learning experiences around strengths and interests (3)
16. Anxiety and learning in compensatory education (1)
18. Seminar in the development of self-image (3)
20. Developing moral behavior for supporting learning (2)
26. Theories and techniques for establishing rapport (3)
28. Compensatory education evaluation (1)
32. Techniques of self-evaluation (1)
33. Seminar and practicum on family resources in compensatory education (3)
34. Supplementary services in compensatory education (3)
35. Practicum in preparation of home environments for cognitive stimulation (3)
36. Practicum in utilization of non-professional personnel (3)
44. Race relations (3)
45. Desegregation and integration: factors in compensatory education (3)

Position	SPECIALIST IN CULTURALLY DERIVED LEARNING DISORDERS
Role	Collaborate with Master Teacher, diagnostician, and curriculum specialist in planning experiences needed to free students from any kind of learning problem; supervising and evaluating such experiences; work with family liaison person and parents in support of special school program set up to remove learning problems; supervise and help train student teachers and/or aides.
Training and Preparation	1. Nature of the competent learner (3) 2. Culture and its relationship to perception and learning (3) 3. Kinds of learning and the conditions of learning (3) 4. How to plan for learning (3) 5. Practicum in techniques for developing perceptual speed and acuity (3) 6. Nature of cognition (3) 7. Memory (3) 8. Conceptual behavior (3) 9. Transfer of learning (3) 10. The nature of volition and perseverance--increasing the capacity to intend and carry something through to completion (3) 11. Management of feelings and emotions--principles of self-control (3) 12. Seminar in motivation (3) 13. Reward and punishment and the nature of encouragement (3) 14. Handling frustration and failure--identifying and individualizing learning experiences around strengths and interests (3)

15. Seminar and practicum in learning disabilities (3)
16. Anxiety and learning in compensatory education (3)
17. Theory and practicum in contingency management (3)
18. Seminar in the development of self-image (3)
20. Developing moral behavior for supporting learning (2)
23. Techniques in the presentation of materials for individualizing instruction--utilizing the sequential hierarchy of content arrangement and the concrete to abstract approach (1)
24. Techniques in developing study skills, study habits, ability to take tests and follow direction (1)
26. Theories and techniques for establishing rapport (3)
27. The nature of curiosity and techniques for developing a demeanor of inquiry (1)
28. Compensatory education evaluation (1)
29. The principles of behavioral cybernetics applied to compensatory education (3)
30. Techniques in the analysis of child behavior (3)
31. Tests and measurements for disadvantaged students (2)
36. Practicum in utilization of non-professional personnel (1)
44. Race relations (1)

NOTE: This training will not prepare a person to handle emotionally disturbed cases that are extreme, mental retardation, or other forms of organically based disorders.

Position	HEALTH AND/OR MEDICAL SPECIALIST
Role	Assume responsibility for program planning and implementation related to maintenance of health; collaborate with family liaison worker to assure that home conditions are conducive to good health; help with referral service; administer first aid when needed; assist teacher in hygiene instruction; maintain health records on students, etc.
Training and Preparation	The following are supplementary to a standard medical or nursing background: 2. Culture and its relationship to perception and learning (3) 5. Practicum in techniques for developing perceptual speed and acuity (2) 26. Theories and techniques for establishing rapport (3) 34. Supplementary services in compensatory education (3)

DESCRIPTIONS OF CONTENTS OF TRAINING EXPERIENCES

1. NATURE OF THE COMPETENT LEARNER

This aspect of the training involves acquiring a relatively thorough understanding of the program's main objective in terms of the capacities characteristic of a competent learner and how these capacities insure competence. (Refer to the Description of the Competent Learner, page 56.)[97]

2. CULTURE AND ITS RELATIONSHIP TO PERCEPTION AND LEARNING

Culture refers to ways of feeling, thinking, and acting that are transmitted from generation to generation. Understanding a "disadvantaged" child's prior capabilities (including knowledge, attitudes, social skills, etc.) will necessitate understanding how culture shapes these prior capabilities. The culture of the middle-class child provides him with a "hidden curriculum" that prepares him for the traditional school experience. This is particularly true in the case of language development.[61,76,107] This course will give teachers a solid background for understanding the disadvantaged child in broad general terms.

3. KINDS OF LEARNING AND THE CONDITIONS OF LEARNING

One of the primary conditions of learning is the existence of prior capabilities, conditions internal to the learner; there is another category of conditons that are external to the learner; these are matched in various ways and make up different kinds of learning.[60] Growing up in poverty produces a set of prior capabilities different from that the middle-class child will bring to the school situation. "Compensatory education" should refer to the type of system that matches a new kind of external set of conditions to the prior capabilities of the disadvantaged child.

4. HOW TO PLAN FOR LEARNING

This concerns knowledge and application of theories of planning in relationship to teaching and learning and includes defining performance criteria, behavioral objectives, and defining alternative routes to the achievement of instructional objectives on different levels.[63,64,65,110]

5. PRACTICUM IN TECHNIQUES FOR DEVELOPING PERCEPTUAL SPEED AND ACUITY

Students from disadvantaged backgrounds are sometimes known to have reduced perceptual spans, speeds, and acuity. Discussion will center primarily on visual and auditory modes of sensory reception. Exercises for increasing perceptual capacities (using tachistoscopes, projectors, and recorders) are demonstrated and opportunities for training disadvantaged youngsters will be provided.[108,109]

6. NATURE OF COGNITION

This includes a review of the theories of cognitive organization and functioning, with an emphasis on the following cognitive processes:[71,72,73,74] convergent processes, divergent processes, translation from one symbolic form to another, interpretation processes, formation and application of principles, analytic processes, synthesis, evaluation and judgmental processes, and forming and testing hypotheses. A practicum is associated with this course in which students are given instruction in how to work with any given curriculum materials so that these processes in children are strengthened.

7. MEMORY

Certain kinds of experience facilitate storage of information. Forgetting is a special case of not being able to retrieve information that is stored. Though less is known about the processes of memory and information retrieval than is comfortable to admit, enough is known to provide teachers with information that can make a difference in the ability to memorize being developed by children whom they teach.[67,68,69,70,87]

8. CONCEPTUAL BEHAVIOR

One capacity which readily distinguishes a competent learner from an ineffective one is the capacity to form, identify, and utilize concepts. The chief function of conceptual behavior is to enable the organism to bring a manageable order to the inordinate complexity of the environment by classifying objects, events, ideas, behavior patterns, and feelings.[62,66]

9. TRANSFER OF LEARNING

The capacity to transfer knowledge both laterally and vertically is a general factor underlying competence in learning. Certain approaches in teaching help to facilitate transferability. This is of particular importance in helping disadvantaged children "catch up."[77,88] Teachers are given practical exercises in how to induce the transfer of learning as a habitual part of instruction no matter what subject is being taught.

10. THE NATURE OF VOLITION AND PERSEVERANCE--INCREASING THE CAPACITY TO INTEND AND CARRY SOMETHING THROUGH TO COMPLETION

Volition and perseverance are examined in relationship to motivation, aspiration levels, sense of personal future, and self-expectations. Practical ways of helping a child to strengthen these capacities are discussed.[124,110]

11. MANAGEMENT OF FEELINGS AND EMOTIONS--PRINCIPLES OF SELF-CONTROL

Because of frustrations, pressures from injustice and lack of consistent patterns of reward and/or punishment, disadvantaged youngsters may find it difficult to control impulses and aggressive behaviors. This course provides basic information on how to help a student to begin to control himself in constructive ways.[102,103,104,122]

12. SEMINAR IN MOTIVATION

One way of conceptualizing a basic problem facing all students needing compensatory education is in terms of motivation. Without motivation to attend, to pay attention, to become involved in the learning process, little learning takes place. Students who come into the public school system from a different cultural background will experience the structure of values in the public school system as perpetual criticism of them for certain "deficiencies," a focus on failure, rather than on support for positive efforts made. The seminar deals both with theoretical aspects of motivation and the exploration of specific techniques for dealing with practical problems of students requiring compensatory education with particular reference to the way in which teacher attitude and behavior can help foster growth and motivation. The concept of "competence motivation" is also examined.[93,106]

13. REWARD AND PUNISHMENT AND THE NATURE OF ENCOURAGEMENT

This course reviews the practical applications of research findings concerning reward-encouragement and punishment-discouragement.[78,79,83]

14. HANDLING FRUSTRATION AND FAILURE--IDENTIFYING AND INDIVIDUALIZING LEARNING EXPERIENCES AROUND STRENGTHS AND INTERESTS

This course examines the ways in which so many remedial efforts fail because they concentrate on weaknesses where there is little interest rather than on strengths. It includes a re-conceptualization of "failure" as nothing more than a useful trial which eliminates one approach and points to a potentially more promising approach to be used on a subsequent trial.

15. SEMINAR AND PRACTICUM IN LEARNING DISABILITIES

The general psychological aspects of learning disabilities will be reviewed, the relevant research literature will be discussed, and the specific applications of principles

of remediation will be formulated. The seminar will be limited to a discussion of those learning disabilities which are traceable to cultural rather than organic causes. The practicum will involve the application of contingency management techniques to specific and actual learning problems of students.[125]

16. ANXIETY AND LEARNING IN COMPENSATORY EDUCATION

This course will enable teachers to utilize anxiety as a motivator, to create some anxiety if need be, to control it, and to utilize it in fostering attention, using its reduction as a reinforcer, and as a means of enhancing learning. This course will also be useful for counselors who would like to take advantage of mild states as a means of enabling students to gain insights into their own strengths and weaknesses, and thereby come to know themselves better.[113,114,115,116,117]

17. THEORY AND PRACTICUM IN CONTINGENCY MANAGEMENT

This practicum will be used to train contingency managers for dealing with specific problems in compensatory education where the behavioral pattern of students mitigates against maintenance of attention long enough for learning to be possible. The research literature will be reviewed and actual problems will be set for each student to solve in terms of managing contingencies. Students specializing in learning disorders will remain in the practicum until they are able to demonstrate their capacity to analyze a given teaching-learning problem and solve it by application of Premack's principle (that if behavior A is more probable than behavior B, the probability of behavior B can be increased if it is made contingent upon behavior A). Such techniques may be used to break into student's habit patterns which impair learning efficiency.[130]

18. SEMINAR IN THE DEVELOPMENT OF SELF-IMAGE

The seminar will be devoted to a review of the research literature on the formation of the self-image and its relationship to perception, motivation, emotion, confidence, and competence. Perception refers to the organization of sensory input in terms of

past experiences and present needs. The self is perceived by itself in terms of the same organizational principles. It is therefore important for teachers and administrators to understand how their relationship to students and attitudes toward them can create dysfunctional self-images, and to know what can be done to modify a self-image to make it more functional. Of particular importance is a discussion of the self-concept of ability and its relationship to achievement motivation.[92,98,105]

19. ROLE OF HUMOR, FUN, AND LAUGHTER IN EDUCATING THE DISADVANTAGED

This course examines the cognitive and motivational elements in humor. Practical ways of relieving the tediousness of some learning tasks by the injection of humor are discussed.

20. DEVELOPING MORAL BEHAVIOR FOR SUPPORTING LEARNING

"Morality" refers here to the aspects of behavior concerned with relationships among human beings. Certain qualities of a relationship can facilitate or impair learning. For instance, a cooperative spirit facilitates learning while a rebellious one tends to impair it. Moral behavior is learned like most everything else. Those who are cooperative in spirit help others while at the same time attracting support from them.[81,82]

21. PRACTICUM IN AESTHETICS IN COMPENSATORY EDUCATION

This course focuses on the practical ways of utilizing drama, music, art, and dance to develop expressive capacities of disadvantaged students, to increase their abilities to discriminate among various stimulus properties inherent in the arts, and to heighten cognitive development generally. In the past, the arts have been regarded as a nice but unessential addition to the curriculum. This course demonstrates how the arts can function as a solid core of the curriculum in a way that will support and serve intellectual and affective growth in all other areas.[91]

22. PRACTICUM IN SELECTION OF MEDIA AND UTILIZATION OF DIFFERENT PRESENTATION MODES

The purpose of this practicum is to provide exercise in arranging the relationship(s) between student and media so that communication is maximally effective.[79,80]

23. TECHNIQUES IN THE PRESENTATION OF MATERIALS FOR INDIVIDUALIZING INSTRUCTION--UTILIZING THE SEQUENTIAL HIERARCHY OF CONTENT ARRANGEMENT AND THE CONCRETE TO ABSTRACT APPROACH

This course will enable student-teachers to review any kind of material which students need to learn, extract the essence of it, break it down into small units, and arrange them in a sequential manner so that making errors in mastering the material is greatly reduced. Sequentially arranged information can also be used to identify the exact nature of the difficulty a student might have in comprehending a certain concept. The capacity to translate materials into a sequence of small learning tasks is crucial to a teacher's functioning as part of a compensatory educational program, particularly where the material is difficult or abstract. The course also serves as an introduction to programming material for teaching machines or other kinds of programmed instruction and for arranging explanations on a continuum ranging from concrete to abstract.[89,90,1]

24. TECHNIQUES IN DEVELOPING STUDY SKILLS, STUDY HABITS, ABILITY TO TAKE TESTS AND FOLLOW DIRECTIONS

This is a short course designed to explain practical means through which students may develop good study habits and skills. (This is particularly appropriate for students planning to work in secondary schools or on the college level where much of the learning is dependent upon independent study.) The course focuses on how to organize material, how to take notes, how to review for exams, how to budget time for studying, how to follow directions, and how to take exams.

25. THEORIES AND METHODS OF FOSTERING CREATIVE POTENTIAL

This course is a practicum in ways and means of identifying a creative person and in-

dividualizing instruction in such a way that creativity is not stifled. But, in fact, will enhance and support the child's learning efforts in all areas. Such techniques will be particularly applicable in the case of the child who shows, for instance, artistic abilities but a disinterest in verbal and mathematical skills. The relationship of imagination, fantasy, and intuition to creativity is also explored.[96]

26. THEORIES AND TECHNIQUES FOR ESTABLISHING RAPPORT

The capacity to establish and maintain rapport with students is a critical characteristic of an effective teacher, particularly a teacher who is working with disadvantaged students. This course focuses on theories underlying the kinds of human interactions that lead to rapport and ways of applying theoretical understandings in order to achieve rapport.[98]

27. THE NATURE OF CURIOSITY AND TECHNIQUES FOR DEVELOPING A DEMEANOR OF INQUIRY

This short course focuses mainly on techniques for training students how to get information from adults. Since many disadvantaged students are inexperienced in soliciting information from adults and, therefore, simply "tune out" when information which they do not understand is presented in the classroom, this course will train a teacher in techniques for teaching a student how to ask pertinent questions that will elicit information to clear up the difficulty. Research has demonstrated that effective learning often takes place when students can be involved by asking questions, since this gives them partial control over the flow of information and, therefore, partial control of the learning process in general. The psychological nature of curiosity will be explored and ways of fostering it examined.[95,123]

28. COMPENSATORY EDUCATION EVALUATION

Material covered in this course will include explanations of the difference between research and evaluation and how they overlap; the relationship between program or teaching

objectives and educational needs, and comparison of objectives with actual program outcomes; discussion of various kinds of instruments which might be used in the collection of different kinds of data relevant to evaluation; ways of treating data; interpretation of data; analysis of data in terms of program objectives as a means of building evaluation components into the general program.94

29. THE PRINCIPLES OF BEHAVIORAL CYBERNETICS APPLIED TO COMPENSATORY EDUCATION

Performance and learning are analyzed in terms of the controlled relationships between a human operator and an instrumental situation. The concept of the behaving individual as a closed-loop or cybernetic system utilizing the processes of sensory feedback in the continuous control of behavior is explored and applications of the concept to specific learning situations pertinent to compensatory education are discussed. According to behavioral cybernetics, learning as well as other aspects of behavior organization are determined primarily by the nature of the feedback-control processes available to the behaving individual. Therefore, practical experience will be gained in this course in the designing of learning situations to fit the control capabilities of the learner. Grading philosophies and examination procedures as feedback systems are also examined.75,101,121

30. TECHNIQUES IN THE ANALYSIS OF CHILD BEHAVIOR

This course will focus on the description and ecology of behavior, how to record behavior in its context, and the utilization of different instruments for describing psycho-social situations and specimens of different kinds of behavior.

31. TESTS AND MEASUREMENTS FOR DISADVANTAGED STUDENTS

This course reviews the basic theories behind testing programs and offers practical experience in selecting or devising tests designed to assist in the collection of data appropriate to a sound determination of whether or not the goals of any given part of a compensatory education program are being achieved. Students will acquire adequate

knowledge for evaluating specific teaching efforts and for monitoring the teaching-learning process going on in the classroom so that modifications for improvement can be introduced at any time. The need for careful interpretation of tests results in the light of their built-in cultural biases is discussed.[118,119,120]

32. TECHNIQUES OF SELF-EVALUATION

This course is designed to enable teachers to analyze verbal and non-verbal feedback from students as a means of ascertaining their own effectiveness as teachers. Approaches to self-observation in the analysis of subjective feelings arising out of different situations are discussed and applied. Experience will be gained in the interpretation of feedback data, both from students and self-observation, with the aim of identifying modes of behavior that may be tried out as modifications of approaches judged to be ineffective.

33. SEMINAR AND PRACTICUM ON FAMILY RESOURCES IN COMPENSATORY EDUCATION

The school can no longer be regarded as a socializing agent independent from the families of its students or the community in which it is located. This course centers upon ways and means of identifying and utilizing family resources to assist in the educational program of disadvantaged students.[111]

34. SUPPLEMENTARY SERVICES IN COMPENSATORY EDUCATION

When working with severely disadvantaged populations, compensatory educational programs are not complete without supplementary services which help to fulfill more basic needs. This short course discusses various kinds of supplementary services such as provision of dental care, medical care, vitamin supplements, vaccinations, eye care, psychiatric help, and, in some cases, legal assistance. Discussions will include ways and means by which school programs can be integrated with welfare services and other kinds of assistance from community agencies.

35. PRACTICUM IN PREPARATION OF HOME ENVIRONMENTS FOR COGNITIVE STIMULATION

One of the disadvantages experienced by many students from low-income families is the discontinuity between home and school. This course provides a discussion of, and gives the student experience in, planning with parents and alteration of home environment which will help reduce discontinuity and also provide for cognitive stimulation appropriate to the development of the children living in the home. Preparing home environments is extremely important in helping students who come from backgrounds where the middle-class "hidden curriculum" does not exist and, therefore, does not provide them with experiences prerequisite to successful performance in school.[86]

36. PRACTICUM IN UTILIZATION OF NON-PROFESSIONAL PERSONNEL

As educational systems begin to differentiate their staffs, the classroom teacher will be supervising the efforts of the para-professional, the teacher aide, and other kinds of supporting personnel. This practicum focuses on ways of analyzing tasks and defining roles for the para-professional so that the teaching-learning process is maximally efficient.[84,85]

37. PRACTICUM IN THE UTILIZATION OF MEMBERS OF THE PEER GROUP AS TEACHERS AND PLANNERS

This practicum is devoted to training student teachers in the techniques of utilizing other class members as teachers and as planners of activities consistent with the basic curriculum. Research evidence indicates that peer group members used as teachers can often communicate very effectively to their peers, thereby facilitating the learning of their peers, but they themselves also improve in their knowledge and motivation. This is frequently neglected as a classroom resource which could be very effective if properly organized and utilized.[112]

38. CURRICULUM THEORY AND CURRICULUM DEVELOPMENT

This course examines the current theories in curriculum development and includes a practicum in creating curricula on different levels for a variety of purposes.[99,100,101]

39. TRAINING FOR SPECIFIC CURRICULUM AREA

Master Teachers may have one or more areas of expertise in a given curriculum area, such as language arts and reading, math, physical science, behavioral science, biological science, art, dance, music, theatre arts, literature, technology, etc. Basic training in most of these areas would be ordinarily undertaken in the appropriate department of a university or college.

40. COMPUTER AIDED INSTRUCTION FOR DISADVANTAGED STUDENTS

This course will focus on the adaptation of computer education instruction techniques for students who require compensatory education. Special units will be prepared in which the computer will be utilized in presentation of information and the explanation of any operations in utilizing the information which the student needs to know.

41. SEMINAR AND PRACTICUM IN PSYCHO-LINGUISTICS

This course will cover the basic field of psycho-linguistics including the following aspects: linguistic models and functional units of language behavior; mediation theory and grammatical behavior; grammatical models and language learning; theory and practice of verbal conditioning; covert habit systems; memory transformations of verbal units; semantic generalization; and forgetting theory. Experience will be gained in diagnosing psycho-linguistic problems and in basic research techniques related to psycho-linguistics. The above list is not complete and is only meant to serve as a general indication of the contents of the core.

42. SEMINAR IN ADMINISTRATION OF COMPENSATORY EDUCATION PROGRAMS

This seminar will systematically deal with basic problems in the administration of compensatory education programs: staff selection; creating differentiated staffing patterns for large programs; pre-service and in-service training for staff; creating efficient communication channels among staff, students, community people, and parents; integration of the compensatory education program with the regular program; and ongoing modification and evaluation for improvement.

43. THE NATURE-NURTURE CONTROVERSY

This course focuses upon the relationship between this controversy and compensatory education. It will involve a review of the research literature on adopted children, studies of twins, the differences in effects of living in isolation or in institutions, and the effects of nursery-school attendance. Related animal research will be examined.[72]

44. RACE RELATIONS

Difficulties among various racial groups in American society have been perpetuated by its major institutions, including the school. This course focuses upon several aspects of race relations problems: history, the dynamics of prejudice and the psychology of attitude change, human rights and the law, and an exploration of the means by which educational institutions and teachers transmit prejudice from one generation to another through their attitudes, school policies, and learning materials. This course has a practical aspect in that every student participates in small encounter groups during which time he is afforded the opportunity to be confronted with his own attitudes and feelings about all aspects of the racial issue so that he may have a conscious knowledge of how his feelings are altering his perception. Once this process begins, attitudes are able to be modified and insights can be applied to the teaching-learning situation.

45. DESEGREGATION AND INTEGRATION: FACTORS IN COMPENSATORY EDUCATION

Students will review the literature on desegregation and integration and discuss the ways in which the institutionalization of discrimination has made compensatory education necessary as a part of the public responsibility in a modern democratic society. The effects of integration on educational progress will be examined. This course will enable candidates to experience the nature of relevance and irrelevance as it pertains to the teaching and development of materials for black students and those

from other racial backgrounds, and to be able to identify either in materials, attitudes, and behavior.[126]

NOTE: The above learning experiences designate content areas and do not imply length of time required to master them. Presumably this would vary from individual to individual, depending upon background, motivation, interest, and the depth of mastery desired or required.

NOTES AND REFERENCES

1. Harrington reports 40 to 50 million people live in poverty in this country (Harrington, Michael, The Other America, Macmillan: New York, 1962). Havighurst estimates that 15% of the total child population are disadvantaged, and 30% of the school children population in the big cities. (Havighurst, Robert J., "Who Are the Socially Disadvantaged?" Journal of Negro Education, Summer, 1964.) Others place the estimate as high as 40% of the school population being in need of compensatory education.

2. See, for instance, Basil Bernstein's research on how language, as learned while growing up in the home, structures and conditions what the child learns and how he learns and particularly how this can set limits within which future learning may take place.
   Bernstein, Basil, "Social Class and Linguistic Development: A Theory of Social Learning," in Education, Economy, and Society, edited by A. H. Halsey, et.al., Glencoe, Illinois: Free Press, 1961.

3. For a more critical look at Title I, see Robert Dentler's article, "Urban Eyewash: A Review of 'Title I/Year II'" in The Urban Review, vol. 3, no. 4, February, 1969, pp. 32-33.

4. A study of 132 schools receiving Title I funds showed no improvement in achievement on the part of pupils, though again there were evaluation and data collection problems. See Mosbeck, E. J., et.al., Analyses of Compensatory Education in Five School Districts, TEMPO, General Electric Company, Santa Barbara, California, March, 1968. Report is available through the U. S. Office of Education.

5. A review of 150 Title I projects considered to be outstanding reveals the same kind of shortcoming. Though much of the learning activity may be related to aspects of becoming a competent learner, that, as a major thrust, is not present. See Profiles in Quality Education: 150 Outstanding Title I, ESEA, Projects, U. S. Office of Education (OE-37018), 1968.

6. Stake, R. E., and Denny, Terry, "Needed Concepts and Techniques for Utilizing More Fully the Potential of Evaluation," in Educational Evaluation: New Roles, New Means, National Society for the Study of Education Yearbook, LXVIII, Part II, 1969, p. 377.

7. "Unfortunately, specifications which are implicit are difficult to communicate to others, they are rarely analyzed and clearly revised, and they do not serve as clear guides to particular decisions or actions. Implicit specifications may shift without the educational worker's being clearly aware of any change, and, because of poor communication, the attainment of the specifications may defy any attempt at systematic appraisal." The author continues, "If the purposes and specifications for education are not explicit, then it is possible for them to be altered by social pressures, by fads and fashions, and by new schemes and devices which may come and go with momentary shifts on the educational scene. Implicit purposes are difficult to defend, and the seeming vacuum in purpose invites attack and substitution of explicit purposes by a constant stream of pressures and pressure groups."

   Excerpts are from the chapter on "Some Theoretical Issues Relating to Educational Evaluation," by Benjamin Bloom, in Educational Evaluation: New Roles, New Means, National Society for the Study of Education Yearbook, LXVIII, Part II, 1969, p. 29.

8. The Guide to Evaluation of Title I Projects, published in October of 1966 by the U. S. Office of Education (GPO 1966 0-236-150), outlines clearly the importance of behavioral objectives and how to formulate them. See page 8.

9. See also "'School-centered, Waterfront, Compared-to-what?' and Other Educational Objectives," by Scarvia Anderson, in On Evaluating Title I Programs, Educational Testing Service, Princeton, 1966, pp. 23-29.

10. The American Institutes of Research under a contract with the National Advisory Council on Education of Disadvantaged Children compared successful and unsuccessful programs. They held that "an improvement in achievement scores was not considered sufficient by itself to identify a 'successful program.' The achieved gain had to exceed that made by a control group over a comparable period of time, or that to be expected on the basis of normative data, and had to be statistically significant." Title I - E.S.E.A: A Review and a Forward Look - 1969, Fourth Annual Report of the National Advisory Council on the Education of Disadvantaged Children, (GPO 1969 0-331-372), 1969, p. 20.

11. It is a natural sentiment to have reservations about really sound evaluation because it will reveal shortcomings and take away excuses for continuing in the same old way. Donald Campbell expresses the situation clearly: "It is one of the most characteristic aspects of the present situation that specific reforms are advocated as though they were certain to be successful. For this reason, knowing outcomes has immediate political implication. Given the inherent difficulty of making significant improvements by the means usually provided and given the discrepancy between promise and possibility, most administrators wisely prefer to limit the evaluations to those the outcomes of which they can control, particularly insofar as published outcomes or press releases are concerned. Ambiguity, lack of truly comparable comparison bases, and lack of concrete evidence all work to increase the administrator's control over what gets said, or at least to reduce the bits of criticism in the case of actual failure. There is safety under the cloak of ignorance." No doubt this statement speaks to administrators of local projects and the Title I Office in the State Department, but it is particularly true in our case, since what we advocate (especially in the section on training programs), though based on research, nonetheless has never been tried out systematically on any significant scale. Yet, it will be critically important for any such efforts to be rigorously evaluated, political vulnerability notwithstanding. See D. T. Campbell, "Reforms as Experiments," American Psychologist, vol. 24, no. 4, April, 1969, p. 409.

12. Massachusetts Evaluation Report on E.S.E.A. Title I Activities, 1968, p. 33.

13. In the section on Compensatory Education, the Willis-Harrington Report recommends that "consultant staff should be provided through the Division of Curriculum and Instruction essential to unifying, coordinating, and strengthening compensatory education programs and services." See page 44.

14. "Evaluation studies are made to provide a basis for making decisions about alternatives and, therefore, in undertaking an evaluation study, one at once addresses himself to the question of utility." For a useful discussion on the purposes of evaluation as compared to research, see John Hemphill's chapter on "The Relationship Between Research and Evaluation Studies" in the Yearbook of the National Society for the Study of Education, LXVIII, Part II, 1969, p. 189.

15. Written reports are often ineffective communicators. Translation of reports into audio-visual presentations for groups followed by discussion will usually be more effective.

16. Students are rarely recipients of evaluation feedback, yet this can produce greater involvement and commitment to program modification, particularly if they can be included in planning the changes in the program.

17. Most project personnel regarded evaluation as a year-end or end-of-program activity rather than as a process of analyzing continual feedback and then making decisions about alternative ways to improve the program while the program is still going on. Both kinds are needed. The latter has many implications for the timing and frequency of reporting.

18. In Appendix A of the Fourth Annual Report on Title I - 1969, the National Advisory Council on the Education of Disadvantaged Children presents an example of comparisons made of successful and unsuccessful programs. They conclude, tentatively, that the undoubted success of selected programs was "based chiefly on clearly defined objectives; teaching limited by these objectives; a reducation of competing stimuli; carefully trained teachers; and, a small group approach."

19. Providing rewards and incentives for model programs is consistent with the National Advisory Council's recommendation that "the U. S. Office of Education should explore both administrative and legislative means of rewarding well-designed, successful programs and providing incentives for their expansion and implementation by other schools." Page 5 of the 1969, Fourth Annual Report on Title I. See also the recommendation concerning provision of incentives by the state to school districts (Willis-Harrington Report) Quality Education for Massachusetts, The General Court of the Commonwealth of Massachusetts, 1964, page 43.

20. Suchman, Edward A., "Evaluating Education Programs," The Urban Review, vol. 3, no. 4, February, 1969, pp. 15-16. See also, by the same author, Evaluation Research: Principles and Practices in Public Service and Social Action Programs. New York: Russell Sage Foundation, 1967.

21. Reported in Title I/Year II, U. S. Office of Education, 1968, p. 43.

22. "Such programs, in our experience, have usually been planned by teachers or curriculum experts who are separated from district evaluation personnel both organizationally and philosophically." For fully developed statement, see: Hawkridge, David G., and Chalupsky, Albert B., "Evaluating Educational Programs," The Urban Review, vol. 3, no. 4, February, 1969, p. 8.

23. "The reason for the bits-and-pieces approach to the development and organization of Title I programs is that there has usually been insufficient planning in advance. This failure in planning is partly the result of knowledge of how to plan and partly the lack of time to plan." Dyer, Henry S., "Evaluating Educational Programs," The Urban Review, vol. 3, no. 4, February, 1969, p. 10.

24. See Section entitled "Setting up a planning committee," A Survey of Title I Reading Projects, p. 40, published by U.S.O.E., Division of Compensatory Education, November, 1967.

25. Although poor timing was particularly bad during the first year of Title I, the problem still continues. See section "IV.2 Time of Operation and Duration," The Impact of Title I: Assessment Program for New England, New England Educational Data Systems, December, 1967, p. 59. See also the statement of the National Advisory Council on the Education of Disadvantaged Children, p. 7, in their report to the President, January, 1968.

26. "Unfortunately, the failure to consider research and evaluation as an integral component of the educational system has resulted in a sequence of activities which virtually guarantees the equivocal findings characteristic of Title I and other compensatory educational programs... While proposals to obtain funding may have reflected contributions from trained evaluators, these good intentions have been forgotten often or severely compromised once the funds are obtained and the time comes for detailed program planning. As a consequence, non-measurable objectives went unchallenged while evaluators contented themselves with easily obtainable data of questionable relevance." See "Evaluating Educational Programs," by Hawkridge and Chalupsky, in The Urban Review, vol. 3, no. 4, February, 1969, p. 8.

27. State Department Title I Office recently held a number of conferences at which time they announced to Title I project directors and planners that they will receive this kind of documentation for proposals being submitted beginning summer, 1970. Therefore, this recommendation is in the process of being implemented now.

28. Wilkerson, Doxey, "We Must Define Behavioral Goals," Report of Conference on Improving the Education of Disadvantaged Children, U.S.O.E., 1969, p. 27.

29. Johnson, Ray A., "Writing Performance Objectives," A Guide to Evaluation: Massachusetts Information Feedback System for Vocational Education, Massachusetts Department of Education, Division of Research and Development, September, 1969, p. 23.

30. The National Council has expressed a similar concern in regard to projects throughout the country. See Report of the National Advisory Council on the Education of Disadvantaged Children, U. S. Office of Education (GPO 911-878), March, 1968, p. 17, and Fourth Annual Report of the Council, 1969, p. 43.

31. Guidelines Title I of E.S.E.A. of 1965, Department of Education, Bureau of Elementary and Secondary Education, Boston, Massachusetts, July, 1968, p. 2.

32. See memorandum from the U. S. Office of Education dated June 18, 1969, on the subject of "Misuse of Title I Funds by Supplanting State and Local Funds." A copy of this memorandum may be found in the Title I Guidelines, p. 17. (See previous reference.)

33. See Title I Guidelines, Section J on Evaluation, p. 22.

34. It should be noted that E.S.E.A. Title III (PACE) brings about $6 million into Massachusetts annually as opposed to the $16 million provided by Title I. Title III permits the State agency a much larger administrative budget (up to 5% as opposed to 1%). If Title I projects are to have well-designed evaluation programs, more staff support in this area will be needed.

35. For example, many new designs, such as the regression discontinuity design, have begun to appear, several of which should be made known and used, particularly in the case of the evaluation of model programs. See the section on Regression Discontinuity Design in the article "Reforms as Experiments," by Donald T. Campbell, published in the American Psychologist, vol. 24, no. 4, April, 1969, p. 419. This design has direct relevance to the evaluation of programs for the disadvantaged.

36. The Society for the Psychological Study of Social Issues (SPSSI) has published a special supplement, Guidelines for Testing Minority Group Children, which appears in the Journal of Social Issues, vol. XX, no. 2, 1964. It is available from SPSSI, P. O. Box 1248, Ann Arbor, Michigan. Collection and dissemination of these kinds of publications would make a good beginning. This recommendation parallels the recommendation of the National Advisory Council on the Education of Disadvantaged Children that: "Professional educators and social scientists should intensify a review of current achievement tests to further reduce 'culture bound' components that are biased against the disadvantaged child and conceal indications of his true, latent ability; and, that these professionals should also move beyond purely cognitive achievement tests and into other realms--self-concept, creativity, motivation, behavior--where compensatory education may have equally important long-range results." Fourth Annual Report of the National Advisory Council on the Education of Disadvantaged Children, Title I - E.S.E.A: A Review and a Forward Look - 1969 (GPO 0-331-373), p. 5.

37. Webb, Eugene T., et.al., Unobtrusive Measure: Nonreactive Research in the Social Sciences, Rand McNally & Company, Chicago, 1966.

38. The National Advisory Council on the Education of Disadvantaged Children has expressed concern for non-public school participation. They recommend that "the U. S. Office of Education should continue to urge the involvement of non-public school officials in the planning and evaluation of Title I programs." See whole section on "Participation of Non-public School Children," pp. 5-6 of Fourth Annual Report, Title I, 1969.

39. Cook, Desmond, Program Evaluation and Review Technique: Applications in Education, U. S. Office of Education, 1966.

40. Some writers make a useful distinction between feedback and appraisal. "The purpose of the feedback is to enable the teacher to make wise judgments about what to do next in the classroom; the purpose of the appraisal is to describe some state of need, readiness, or ability on the part of the child. These purposes are entirely different and therefore the fact that they are achieved through different procedures seems reasonable. These differences may be noted: (a) In feedback, the decision about what data to collect can be finally made only at the moment of collection, whereas, in appraisal, the decision can be made independently of the situation. (b) In feedback, the object under scrutiny is the activity of a complex system, whereas, in appraisal, it is an aspect of the personality structure of an individual. (c) In feedback, the categories must be useful to the teacher and usually will be expressed in her vocabulary, whereas, in appraisal, the categories should fit coherent theory and are often intelligible only to the researcher or some other non-participant." See Herbert A. Thelen, "The Evaluation of Group Instruction," in Educational Evaluation: New Roles, New Means, National Society for the Study of Education Yearbook, LXVIII, Part II, 1969, p. 119.

41. "Title I is designed to benefit poor children. Somewhat paradoxically, however, the programs made possible by Title I are seriously challenging traditional educational practices and introducing new techniques that promise to benefit fortunate children as well. In time, the major reforms now underway in low-income schools may become accepted priorities for all schools." Title I/Year II, The Second Annual Report of Title I of the E.S.E.A. 1965, U. S. Office of Education, 1968, p. 3. For more specific details see whole section on "Catalyst for Change" from which above quote is taken.

42. Massachusetts Evaluation Report on E.S.E.A. Title I activities, Bureau of Elementary and Secondary Education, State Department of Education, December, 1968, p. 29.

43. "Cost effective analyses...are designed to measure the extent to which resources allocated to a specific objective under each of several alternatives actually contribute to accomplishing that objective, so that different ways of getting the objectives may be compared." See pp. 27-30, Budgeting for National Objectives, a Statement on National Policy by the Research and Policy Committee for Economic Development, January, 1966. See also the reference to the ABT Association, Inc., Cost-effectiveness Model in Title I/Year II, U. S. Office of Education, 1968, p. 117.

44. For a good exposition on the application of program budgeting to the field of educational planning, see Hartley, Harry J., Educational Planning, Programming, Budgeting. Englewood Cliffs: Prentice Hall, 1968.

In listing four imperatives for schools today, the Committee for Economic Development included one on cost-effectiveness: "School systems must employ continuously the results of cost-benefit and cost-effectiveness analyses in order to allocate effectively the resources available to education and to distinguish among programs of high and low priority." (Page 13) In line with this imperative, they urged "immediate exploration by school administrators of the application of program accounting techniques in order to identify costs in school systems and to take advantage of cost comparisons. The adoption of such techniques by school districts will be advanced greatly if assistance and leadership in this area are provided by state departments of education and by university schools of business, economics, and education." Innovation in Education: New Directions for the American School, Committee for Economic Development, New York, July, 1968, p. 19.

45. The Bank Street College of Education study identifies some 10 to 12 benefits derived from having teacher aides on the staff. Most of them are related to a more effective distribution of resources and a more efficient utilization of time. Other important considerations are concerned with the capacity of the aide, particularly if he lives in the same area and/or shares a similar background to the students with whom he works, to function as a positive role model for the students and to help interpret cross-culturally attitudes and behavior both from teacher to pupil and vice versa. Bowman, Garda W., and Klopf, Gordon J., Auxiliary School Personnel: Their Roles, Training, and Institutionalization, Bank Street College of Education, October, 1968, pp. 6-8.

46. Several states, such as Illinois, Michigan, Colorado, and California have more functional definitions of the permissible roles of teacher aides which might be examined as possible models.

47. Chapter 168 of the Acts of 1965 states that an instructional or administrative aide (as used in Section 38 of Chapter 71, which is amended) "shall be a person who does no actual teaching, but acts as an assistant to a teacher."

8. Fifty-two percent of the billion dollars provided by Title I was spent on instruction during its first year. Part of this went into the creation of 180,000 new part-time and full-time professional and sub-professional positions other than teaching. Forty-eight of the fifty-four reporting agencies (state) told of turning to salaried sub-professionals. The First Year of Title I E.S.E.A. 1965, U. S. Office of Education (GPO 1967-0-257-037), 1967, p. v and p. 9.

9. "Assignments for aides varied widely. Most frequently, aides helped prepare materials, worked with individual students and small groups, supervised class work and group games, corrected papers and performed clerical duties. Many school districts also employed aides to work with reading specialists, community workers, nurses, counselors, librarians, and other specialized personnel. During 1966-67, there were 83,500 teacher aides and 6,100 library aides working in Title I programs." Title I/Year II, U. S. Office of Education (GPO 1968-0-312-658), 1968, p. 46.

0. "Teachers' expectations are like self-fulfilling prophecies. Children will achieve what is expected of them. This was borne out by a study made in San Francisco by Prof. Robert Rosenthal of Harvard University. He told teachers that certain of their pupils had a high learning potential, even though some did not. The result was higher teacher expectation and higher pupil achievement at the end of the school year." Title I/Year II, U. S. Office of Education, 1968, p. 44.

1. The Bank Street College of Education study on auxiliary personnel found role definition and role development for aides to be an important factor in the success of programs using aides. Furthermore, training of aides specific to the tasks their roles will require were likewise found to be extremely important. Bowman, Garda W., and Klopf, Gordon J., Auxiliary School Personnel: Their Roles, Training, and Institutionalization, Bank Street College of Education, October, 1966, pp. 6 - 7.

2. See Ausubel, David P., "A Teaching Strategy for Culturally Deprived Pupils: Cognitive and Motivational Considerations," School Review, Winter, 1963.

53. A group of researchers at Arizona State University studied changes in attitudes of educators toward disadvantaged children before, during, and after special in-service training. Teachers who experienced the Title I training changed favorably toward these children while control group teachers maintained unfavorable attitudes. This is positive evidence of the worth of training geared to meet special needs. For more details, see Title I/Year II, Second Annual Report of Title I, U. S. Office of Education, 1968, p. 118.

54. The Center for the Study of Aesthetics in Education at the University of Massachusetts, Amherst, is currently engaged in the development of a curriculum which is based on art experience and its relationship to cognitive and affective growth. The Title III (PACE) program at Attleboro, Massachusetts, directed by Mr. Donald Brigham, is an outstanding example of the way in which involvement in art activities can support motivation for learning at high levels.

55. Title I - E.S.E.A: A Review and a Forward Look - 1969, Report of the National Advisory Council on the Education of Disadvantaged Children, 1969, p. 23.

56. Some school districts have already begun to do this. Some 15% of the local districts increased their 1967-68 regular budgets to support programs initiated by Title I expenditures. Our survey data indicate around 10% involvement in the local financing of compensatory education.

NOTES AND REFERENCES

FOR SECTION ENTITLED "MODEL PROGRAM FOR TRAINING COMPENSATORY EDUCATION PERSONNEL"

57. For a summary statement on differentiated staffing, see Jordan, Daniel C., Task Analysis and Role Definition, Report from the EPDA task force on differentiated staffing. U. S. Office of Education, October, 1967. (ERIC Document Reproduction Service Number ED 027252.)

58. It is admittedly difficult to determine when given individuals are "caught up," since, on the one hand, there may be genetic limitations in given cases which would preclude performing at levels consistent with the norm, and, on the other hand, there are undoubtedly many who, through compensatory services, might come to achieve at a level comparable to the norm, but still not be achieving at a rate commensurate with their capacities. In the former, one would be inclined to say they'd caught up if they are performing to capacity, while in the latter, one might say they had not caught up since they are still "underachieving," even though doing quite well. However, one can compare achievement levels of groups and determine whether or not the group has "caught up."

There is also the controversy over whether or not the middle-class values system which determines what constitutes the norm, should be imposed on members of any subculture. Many have expressed grave doubts that that values system, with its emphasis on materialism, "success," and technology, is even functional for the nation as a whole. This is all the more reason to have the programs focus on the development of competent learners, for they will be freer to examine any values system, make responsible choices, and help the society to change in constructive ways. In this connection, see Fantini, Mario, and Weinstein, Gerald, The Disadvantaged: Challenge to Education, (Harper and Row: New York) 1968, p. 108.

59. For a more fully developed statement, see Jordan, Daniel C., "New Perspectives on Relevance in Education," Report on the 1968 National TEPS Conference, (National Education Association: Washington, D. C.) 1968, p. 25.

60. "It is in fact the existence of prior capabilities that is slighted or even ignored by most of the traditional learning prototypes. And it is these prior capabilities that are of crucial importance in drawing distinctions among the varieties needed for learning... The initial capabilities of the learner play an important part in determining the conditions required for subsequent learning... Each type of learning starts from a different 'point' of internal capability, and is likely also to demand a different external situation in order to take place effectively." Gagne, Robert M., The Conditions of Learning; Holt, Rinehart, and Winston, Inc; New York, 1965, pp. 21-22. See also Melton, A. W. (Ed.) Categories of Human Learning, New York: Academic Press, 1964.

61. The burden of Hess' thesis is: "In cultural deprivation, the pattern of communication that develops between mother and child has an effect upon the child's cognitive equipment and communication skills which handicaps him when he begins his school program." Hess, Robert D., "Educability and Rehabilitation: The Future of the Welfare Class," Journal of Marriage and the Family, November, 1964, pp. 422-429.

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75. "The basic questions to ask about examinations and other evaluation procedures are whether they have a positive effect on student learning and instruction and whether they leave both teachers and students with a positive view of themselves and of the subject and learning process. A primary task of teachers and examiners is to design the examinations and the evaluation process so that they will have these positive effects." Bloom, Benjamin S., "Some Theoretical Issues Relating to Educational Evaluation." Educational Evaluation: New Roles, New Means. National Society for the Study of Education Yearbook, LXVIII, Part II, 1969, p. 48. See whole section for review of ways to insure that student evaluation procedures do have positive effects.

76. Ausubel, David P., "The Effects of Cultural Deprivation on Learning Patterns," in Whiteman, Shelton W., (Ed.), The Disadvantaged Learner. The Chandler Publishing Company: San Francisco, 1966, p. 257.

77. Lateral transfer refers to the kind of generalizing of information or skills to a wide range of situations that have some new element in them and which are at a similar level of complexity. Vertical transfer depends upon knowing the relevant subordinate concepts or principles if superordinate principles are to be grasped readily. This kind of transfer is obviously enhanced by the variety and scope of previous knowledge the individual has acquired. These notions of transferability have great potentialities for increasing the effectiveness of compensatory education programs. For further information, see Grose, R. F., and Birney, R. C. (Eds.), Transfer of Learning, (Princeton: Van Nostrand) 1963; and, Stephens, J. M., "Transfer of Learning," in C. W. Harris (Ed.), Encyclopedia of Educational Research, (New York: MacMillan) 1960.

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124. It is worthy of note that the notion of volition or intention is beginning to regain its respect as a concept in psychology. Karl Pribram has stated his belief that the anterior portion of the intrinsic system of the association areas of the brain mediates intentions, and that it is the integrative mechanism for the motivational pro-

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127. It is important to note that how to feel about things is also learned. Thus, attitudes, feelings of joy, happiness, etc.--the emotional underpinnings of motivation--are learned. The learning how to learn operation heavily involves this kind of learning and much of this is contingent on general conditions of the community and home in which a child grows up. No society can expect its schools to compensate for the devastating effects of discrimination, injustice, and exploitation. Obviously, the cycle of poverty is perpetuated by serious defects in the social order of which educational institutions are only a part. The other parts of the social order also need new models as well. (For further elaboration on this point, see Fantini and Weinstein, reference no. 58.)

128. These characteristics are arranged roughly hierarchically, though it is not possible to maintain that "higher order" capacities do not operate simultaneously to one degree or another with lower order ones at an early age. What is needed is a multi-dimensional model of a competent learner. Verbal explanation is always linear and therefore cumbersome if not inadequate.

    Elaborations on some of these characteristics can be found in Bloom's taxonomy of education objectives and in Guilford's explanation of the structure of the intellect.

129. Rational here refers to the capacity to foresee consequences of behavior and assume responsibility for them. This includes the management of anxiety and the redirection of hostile impulses into constructive, morally responsible action.

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131. "Programs that show signs of immediate success often are not, from a long range point of view, really successful because the children begin so far behind more fortunate students and have so far to catch up. Under the most optimistic assumptions of normal progress, Title I children remain behind all through their school career because they start so far behind on the first test administered to them in school.

"Therefore, a gain that matches the norm is not sufficient. In order to reduce the gap between the average scores for Title I schools and those of other schools, the Title I group must achieve at a greater rate than the norm."

Title I/Year II, The Second Annual Report of Title I, U. S. Office of Education, 1968, page 33.